

Issue 1 May 1995

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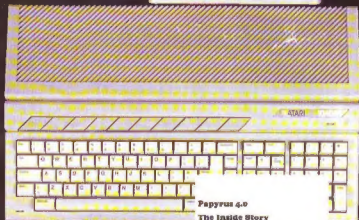
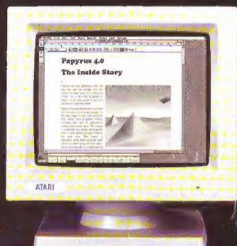
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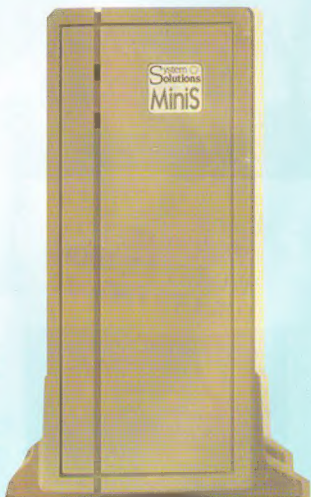
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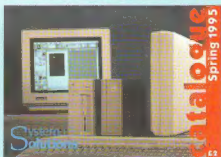
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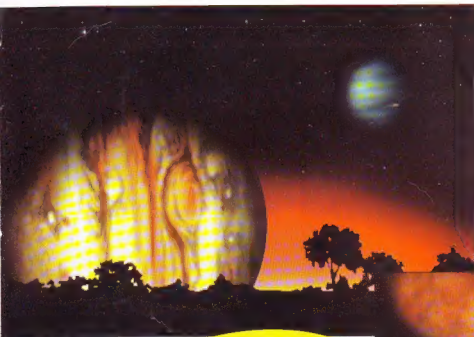
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System Solutions

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FALCON SYSTEM
WORTH £1,700!
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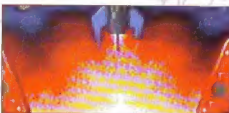
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The Jaguar finally has a do-or-die war game!



Team Work

When I completed the final issue of Atari ST Review, I sincerely intended to put my feet up and take it easy for six months - but life rarely turns out the way you plan

it. The Atari World project was presented to me, and from the start I could see great potential. Three magazines, covering all aspects of Atari computing from the first time you turn on your machine through reviews and features up to various professional topics, appealed to me, for here was the chance to support all aspects of our market properly.

But to succeed, it was imperative that the same editorial team was used and, to a person, they'll be appearing within these pages. Ofir Gal, as technical editor, will oversee the accuracy of our reviews and Q&A sections; Andrew Wright, the assistant editor, will endeavour to uphold high editorial standards; and Nial Grimes, our features editor, will ensure that the main stories are topical, interesting and, most importantly, relevant to Atari enthusiasts.

Cover disk? No, because we think we've come up with a better idea in our Reader Disk as you'll find out on page 14. Games section? No, but our Reviews pages will play host to all new Atari games as they appear.

I've been reading Atari magazines since the late '80s, and I can never recall one with two free mags such as ST Source and Atari Pro. Issue by issue, Source will build into a reference library of useful info, while Pro will search into areas that no other mag currently touches.

Our two competitions place an entire Falcon system up for grabs, plus 25 copies of UVK. All you have to do to enter is to fill in our survey on page 43 and answer a couple of easy questions. The survey is very important - is this first issue along the lines of what you want and need from an Atari mag? If not, tell us.

ST Review was a damn good magazine but had a few shortcomings, not least of all the fact that you couldn't find it in the shops! Atari World is being distributed by one of the best companies in the business - and over 37,000 copies of this 116-page first issue have been printed. Check out our subscription offers on page 52, and if you don't want to subscribe until you've seen a few more issues, then simply place an order with your local newsagent for the time being.

It's good to be back - and in case any ST Review readers are wondering, no, my kitchen table never did get cleared...

Vic Lennard
Editor

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Don't forget to read this
month's FREE magazines...

ATARI Pro

ST Source

SNIPPETS

● An Atari Show modelled closely on the recent ST Review-sponsored events in the UK, was staged in Paris during mid-December and attracted around 2,500 Atari enthusiasts. Organised by Compo, a second show has been organised at a bigger venue, also in Paris, over the weekend of April 1/2. This first issue of Atari World made its world debut at the Paris Atari Show and we would like to extend an *entente cordiale* to our French readers.

● Floppypop (01224 312756) has tied up a distribution deal for its Floppypop range of products with the Atari ST Users Group of Winnipeg, Canada. As a result, customers in the US and Canada will be able to order their licencedware directly from the club. The Floppypop range currently consists of 50 titles and is growing every month. Authors wishing to know more about Floppypop should contact Floppypop for their information leaflet; customers can obtain a copy of the catalogue free of charge by sending two blank disks.

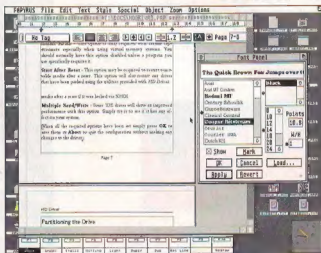
● The MIDI and Electronic Music Show (MEMS '95) takes place later this month. Currently the UK's premier music event, new products unveiled at the Los Angeles NAMM Show and the Frankfurt MusikFest can be seen for the first time in the UK. MEMS '95 runs from April 21-23 at Olympia 2, Kensington, London.

● Another show about to get on the road is Gastelner's Spotlight 1995. Atari and Amiga specific, companies such as HiSoft, 16/32 Systems, Digital Awareness, Compo Software and Power Computing have already booked into the show which takes place at the Novotel, West London on June 10/11. More information from Gastelner Technologies on 0181-345 6000.

● Magic Media, the only British manufacturer working on a virtual reality headset, has been forced to abandon the project at the eleventh hour. A prototype of the unit is said to have been completed but failed to reach the production stage due to a dispute between the firm and its financial backer. The planned headset was to have sold at £299 (plus VAT) and would have been Jaguar compatible, assuming that software support was forthcoming.

News

HiSoft to continue Atari support



Papyrus - colour printer support in version 4.

Contrary to recent reports, HiSoft (01525 718181) has no intention of leaving the ST scene. In fact, its commitment to supporting existing packages and bringing new products to market is as resolute as it has ever been. The misunderstanding came about as a result of a comment made by HiSoft on the CIX bulletin board, stating that it was not planning to develop any further Atari-based

titles in-house. When asked about this, managing director David Link told Atari World that although in-house development had ceased, HiSoft would continue to bring new releases to the market and support existing Atari products. He backed this up further by giving us a brief outline of the plans for ST-based products over the next few months.

Products currently due for a

major revamp include its flagship document processor Papyrus, which will feature colour printer support in version 4, and Diamond Edge 2, which promises a completely redesigned interface and will include a built-in disk sector editor among other things. Another of the packages due for a major upgrade is leading database package Twist, but no details on Twist 3 were available as we went to print. A minor upgrade to Diamond Back 3 is also expected within the next few months. Other products that are being actively maintained include Devpac 3, Lattice C, Devpac DSP, Harlekin 3, True Image and Clarity Falcon.

HiSoft recently produced a low-cost professional SCSI interface for the Amiga which proved to be an outstanding success. As a result of this, it plans to bring out similarly specified low-cost SCSI interfaces for Atari computers later in the year. However, rather than merely supplying the interfaces, it is likely that HiSoft will be offering complete hard drive systems. We'll keep you posted as more details emerge.

English MagiC

The English version of MagiCMac is now on sale from System Solutions (0181 693 3355). This package allows most well behaved GEM-based ST software to run on an Apple Mac. Compatible programs operate in 2, 16 or 256 colours and run faster than they would on a TTI Also, the different applications multi-task under a modified version of MagiC, hence the name. The current version is a

full implementation apart from printer support being limited to localtalk printers via GEMDOS, or



An English version of MagiCMac, seen here at CeBit, is now available.

parallel printers connected by the PowerPrint hardware. Full printer support will be in the form of an adapted version of NVDI 3 that will also support True Colour. MagiCMac runs on any 68030 or 68040-based Apple Macintosh under System 7. Price is £149.95.

There is also an upgrade to NVDI 3. The latest version (3.02) supports colour printers and has a few small bug fixes. Available now for £49.95, current users are entitled to a free upgrade on receipt of the master disk, a copy of their invoice and an SAE.

Silly Grafix Comic Beyond Relief

Grafix is the first commercial release from Silly Software (01705 785203) since it split from IDS. As the name suggests, the package aims to teach you the basics of computer graphics, but what makes this art tutor stand out from the crowd is that it also delves into animation, with four of the eighteen tutorials dedicated to the subject.

The program is designed with the complete beginner in mind and features simple mouse-controlled menus linked to each other for ease of use. Select the desired option and a series of well-presented illustrations take you through the tutorial step by step. While perusing any tutorial, the on-line manual can be called up to give more detailed information on your chosen topic.

Also included is Grafix Art, a basic art package. Although Silly Software admits that

this is not as powerful as Canvas, True Paint or EZArt Professional, it does offer all the usual graphic tools as well as 15 built-in fonts and an animation option. Grafix Art is integrated into the package and can be accessed directly from the main menu, allowing you to try out newly learned techniques without having to quit and reload. Price is £19.95.

GRAFIX



Visual art lessons from Grafix – just like being back at school, really...

Frank Charlton and Andy Curtis, who run AdLib BBS (24 hours, speeds up to v34 on 0193 3702659) recently came up with an enterprising idea to raise extra funds for the BBC's Comic Relief appeal. "The Great 1995 AdLib Joke-athon" was a fun event in which users submitted humorous works of art or prose to the judging panel with prizes being offered as an incentive to participate.

The event consisted of four categories: jokes, humorous prose, poetry and cartoons – the general rule was that if you made the organisers laugh, you'd win something! Users paid a minimum of £1 to enter each category and were encouraged to submit multiple entries to help the fund raising. The organisers plan to immortalise the best entries into a disk mag that will be released into the Public Domain.

As well as giving up their spare time to organise the event, Frank and Andy's contribution extended to covering the associated telephone calls and postage costs out of their own pockets.

As well as the generosity of all those who participated, a number of Atari-based companies and individuals including (in no particular order) JCA Europe Ltd, Compo Software, ST Format, 16/32 Systems, Joe Connor, FaST Club, HiSoft, Floppypshop, Gastaineir, André Willey, Ofir Gal and Denesh Bhabuta, donated software and hardware with a retail value of almost £4,000 for use as competition prizes.

It just goes to show that the Atari community can be as generous as anyone else when it comes to supporting a good cause.

COMIC RELIEF

New DeskJet range



DeskJet 540 – superb black and white printing, and colour for an extra £35. Hewlett-Packard (01344 369222) looks set to keep its runaway lead in the inkjet printer market with the launch of a completely redesigned range of DeskJets. The entry level

model is now the DeskJet 540 which replaces the monochrome 520. Although it hasn't changed much in terms of resolution and mechanics, the case has been restyled, the firmware upgraded and a more powerful processor

installed. It also prints colour images at twice the speed it did before.

Hang on a minute! Aren't we getting monochrome and colour mixed up? Not at all – the new entry level DeskJet can be turned into a colour model with the simple addition of a £35 colour kit that includes the first cartridge! With an RRP of £275 (ex VAT) this will

put it right at the top of many ST owners' shopping lists.

The new DeskJet 540's case is much more compact than before with a slightly smaller footprint, and the control panel has been simplified to just two buttons. Swapping

a black cartridge for a colour one is easy too. As soon as you lift the lid, the carriage automatically centres itself, letting you lift the cartridge out of the holder and pop the new one straight in. Just how easy this all is in practice, we'll see next month when we bring you a full review.

Of course, the 540's colour kit makes the 560C obsolete so its replacement, the 660C, has been substantially upgraded; it now prints in monochrome at up to 600 by 600 dpi, is twice as fast as its predecessor when printing in colour and costs £460. It is aimed primarily at the business market or the demanding home user as the high resolution, coupled with HP's Resolution Enhancement Technology (RET), will give many laser printers a run for their money.

Incidentally, if that still isn't good enough for you, there's always the brand new 8ppm DeskJet 850C and colour Resolution Enhancement Technology (C-RET) at £539 or the 8ppm DeskJet 1600C at £1150. Choices, choices...

German Shows '95

Reports from CeBit and the Frankfurt Music Fair. The whole world descends on Hannover in Germany for one week in March each year to see latest developments in computing – at least, that is how it feels when you're there. In this tenth year of CeBit, more than 6,000 exhibitors from 57 countries occupied 21 exhibition halls; 314,000 square metres of exhibits and 270,000 visitors!

The Pentium and PowerPC were the dominating computer systems at this year's show. Apple Macintosh teamed up with IBM, each showing their PowerPC. Apple's newly-licensed PowerPC manufacturers, Pioneer, Power Computing Corporation and Radius, were showing their new creations running Macintosh software.

Sadly, this year there was no presence of Atari Corporation. Of course, there are no new Atari computers to show and the Jaguar is perhaps not the right product for the world's largest computer show. However, the Apple main stand in Hall 11 was the meeting point for all German Atari Software Developers and programmers. In a push to expand market share, Apple is actively supporting developers from other platforms; Apple

provided three LC630s running MagiC/Mac to demonstrate Atari Software. Macintosh users were amazed by the range of "new" software.

Thomas Tempelmann of Application Systems patiently explained the secrets of MagiC/Mac. Wilfried and Sven Behne of 2B showed the special version of NVDI for MagiC/Mac, and Papyrus and Calamus SL were also demonstrated, including various powerful modules for the latter. Can QuarkXPress touch up a drawing? Nope. Digital Arts was showing its range of software including its latest 7-colour publishing package: very interesting but also very specialist. These guys certainly know their stuff.

So who says the Atari market is dying? Far from it. MagiC/Mac has definitely caused a wave of confidence among German Atari developers and Atari users. Look out for a host of new products and upgrades from Germany.

Other interesting new products were various high speed modems all running at up to 28,800bps (the V.34 standard). ISDN, the digital telephone system for data rates up to 128,000bps, is becoming popular for live computer video conferencing and wide area networking. ISDN is very

affordable in Germany at CeBit: stand courtesy of MagiC/Mac – who'd have ever believed it! and monthly charges of only DM42.10 – more expensive than a normal line, but for this you get two channels! So you can use you modem at the same time as the telephone. In the UK the connection fee alone will set you back £400. Come and join the '90s, BT.

Steinberg showed Cubase Audio for the Power PC with up to 32 tracks of 16-bit audio – if you can afford it! The Falcon is still the most affordable digital audio platform...



SoundPool's AudioTracker – full review next month.

Music time

... which brings us nicely to the Frankfurt Music Messe. This is the most important exhibition for the German and European music scene, showing new products to the trade and public.

Every year, there seem to be hundreds of exhibitors showing loudspeakers, mixing desks, microphones, studio cables and show lighting gear, so it took some time to find the really interesting bits.

And there it was on the Steinberg stand, on show for the first time – the new C-Lab Falcon 030 MkII. It looks like the Atari Falcon but comes with some interesting new features. The analogue inputs and outputs have been re-engineered to allow line levels up to +4dB. The channel separation and signal to noise ratio have been improved and the internal hard disk is now a fast 2.5 inch 514Mb SCSI drive. The C-Lab Falcon comes with 16Mb memory as standard. A more enhanced design of the Falcon is currently being developed, and C-Lab promises a rack-mounted version in the near future.

Really exciting was the SoundPool stand. The designers and manufacturers of the well-known Falcon Digital Interface and Falcon Audio 8 interface had lots of new products for the Falcon musician, including the Audio Workstation 1. Based on a rack-mounted Falcon 030, it features all necessary add-ons for professional audio work in one unit.

Much in demand are MIDI port expanders for the Atari computer.

The brand new MO4 connects to the parallel port and provides a further four MIDI outputs. Already compatible with AudioTracker and Cubase, and with software for Notator Logic available soon, the MO4 will cost £149.

On the DAT side, SoundPool showed the £259 SRC, which converts all sampling rates to the standard digital audio frequencies of 48, 44.1 and 32kHz, and DataDAT, backup software for the FDI. Steinberg FDI owners can buy this separately for £39.95. AudioMaster, the digital mastering software, has been updated to version 1.5, and AudioTracker now works with MIDI automation. The mixer can be controlled by an external mixer via MIDI. Very handy this, and much faster than twiddling knobs on screen using the mouse. System Solutions are SoundPool's UK distributors.



Steinberg's stand at the MusicMesse featured C-Lab Falcons running Cubase Audio and Avalon 3.0.



TEAM



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Quite Unique...



Following the runaway success of *Obsession*, Unique Development Sweden has SubStation almost ready for release. The game is set in a futuristic undersea energy substation; the game begins when all communications with SubStation are lost and the owners enlist the help of the US Government to find out what has happened.

SubStation is a fast action arcade game in which you move around a real-time gouraud-shaded 3-D world. You can run, walk, strafe, pick up



One down – now if only I can reach that ammo clip...

items, choose between numerous weapons, open doors and move between sub-levels using elevators. Several functions such as strafe, rotate, run and fire can be performed at the same time, giving you total control of your actions. One of SubStation's unique features is the use of a special sound effects system called Distance & Direction Audio. This allows you to hear where the monsters are lurking. Another great feature is MIDI Link – up to four players, each running SubStation, can compete either individually or by forming two teams. SubStation requires an STe or Falcon with a colour display and 1Mb of memory. Control is by way of the Jaguar Power Pad or the keyboard. Release is set for May 1 and price has been fixed at £24.95. SubStation will be distributed in the UK by JCA Europe Ltd (01734 452416) and Merlin (01452 770135).

Tales from the Internet

When you stalk the electronic hinterland with its unconscious neural pathways and the shambolic arcing waves of data there's one thought that normally comes to mind: "It's pretty big, innit?" The Internet is huge – it has upwards of 60 million users and 4 million different sites.

Within this gigantic landscape there is something for you, the intrepid Atari user. In fact, there's a lot for you, as the Atari scene is healthy, fresh and vital on the 'Net.

More than 150 messages a day pass through the Atari newsgroups, from file requests to technical programming queries. There are massive Atari software depositories, so large that it'd be difficult to squeeze them onto five CD-ROMs. There are Atari information providers, mailing lists about Atari programming, real-time Atari chat lines and a myriad of writers, programmers, software houses and Atari owning friends to e-mail.

This month has seen a very welcome change to the

connection scheme at an important Atari software site, HENSA, at Lancaster University, had decided to run a closed door policy that excluded everyone but other academic organisations.

This was a great shame; Danesh Bhabuta, who ran the Atari section, is probably the most enthusiastic Atari fan I know. Over the past year he'd built up the software archive there into one of the best in the UK. It looked like his good work would go to waste.

But now, partly due to pressure from unhappy Atarians, there are some free FTP sites available all day (more in the evenings) and World Wide Web access is unrestricted after 8pm. You can connect to HENSA by using the FTP or gopher address, micro.hensa.ac.uk, or by using the Web URL, <http://micro.hensa.ac.uk>.

Next month I'll bring you some news from the newsgroups and take a look at one of the largest FTP sites anywhere on the 'Net.

JAGUAR

UPDATE



Shades of Wing Commander, Tie-Fighter and Star Raiders are evident in 4Play's Battle Sphere. Can't wait!

Tie-Fighter was one of the hottest PC entertainment releases last year and if you found yourself suffering from twinges of envy, news of BattleSphere for the Jaguar will lay them to rest. Although the game is not backed up by any specific licence, it draws heavily from Star Raiders (the play mechanics) and Tie-Fighter (the graphics) – Star Wars along with Red Dwarf can account for just

about everything else. The programmers are obviously complete soft fanatics, so this one should be a ball.

Fight For Life, Atari's answer to Virtua Fighter, is also rapidly approaching release, and judging by the screen shots, it's going to be quite some game. Sega's smash has always relied very



Fight for life is influenced heavily by Virtua Fighters, but texture mapping makes the characters look much more realistic.

heavily on gameplay, so we can only hope that Atari have got this angle well covered. With François Bertrand (reportedly a member of the original VF project) on the case, it should be a real stealer. Also strong in the graphical stakes is Hover Hunter – a blast-'em-up set over a truly stunning three-dimensional landscape is looking equally impressive. Yeah – bring on those surround sound effects!

Quality-wise, Jaguar games are definitely heading in the right direction. Doom has had the best reception of any release thus far – the Internet is usually packed with conflicting reports but you'd be hard-pressed to find anything but praise for id's top-notch conversion.

Reliable information on the Jaguar CD add-on is finally begin-



Impressive three-dimensional landscapes are Hover Hunter's trademark – an aggressive techno soundtrack adds to the atmosphere.

ning to trickle through official channels. The US price is set at a very reasonable \$149 and a combined Jaguar/CD system is in the pipeline. This follows on from the news that the Jaguar itself has dropped in price to \$189 (under £130 in real money). Atari are claiming that Jags are now flying out of the doors; yes, they would say that, but given the new price point it's quite possibly true...

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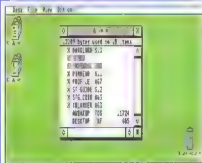
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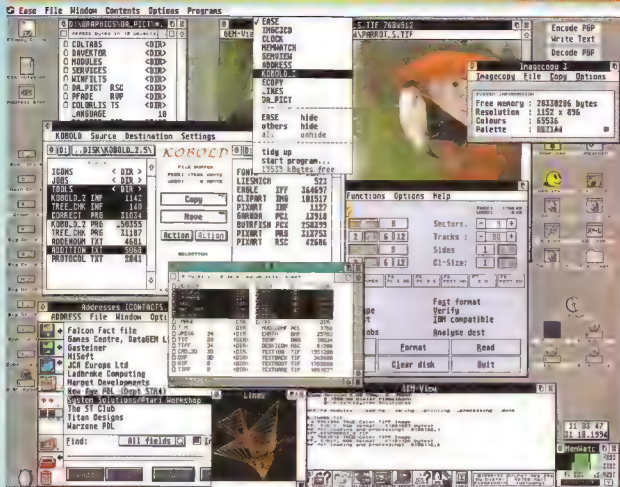
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MagiC multitasking

System
Solutions



Company of the Year 1994



MagiC is undoubtedly the best multitasking software available for the Atari. It is true pre-emptive multitasking and a full TOS replacement that runs so fast, it really does seem like MagiC! It runs on all ST, Mega and TT computers with 512Kb of memory, but 2Mb is recommended for a usefu working system. MagiC Desk, a replacement desktop, and a powerful command shell are included. It has a very fast disk-filling system, accelerated serial, MIDI and printing routines. MagiC is excellent with Calamus SL and even compatible with Notator Logic but please note that some MIDI programs like Notator SL and Cubase are not compatible with any multitasking software. Also available for Apple Macintosh 030 and 040 computers!

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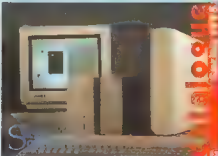
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AWB Issue 1

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REVIEWS

Atari World's reviews section covers all of the latest software and hardware in the market. This month's offerings include an exciting preview of Positive Image, a promising new graphics program.

Inside:

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27 Positive Image preview

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Atari World Scoring System

Each product we review (hardware, software, PD and shareware) is marked out of 10; an average product gets around 5.

A mark of 7 or 8 results in a "Buy Me" award.

If the product is in an area that interests you, then it warrants careful consideration.

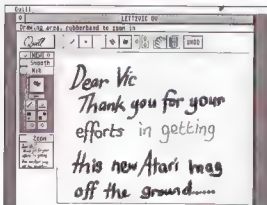
A mark of 9 or 10 receives the ultimate accolade of an "Atari World Beater" award. Such a product has been accepted by our eagle-eyed reviewers as being excellent in its class.



In for *the Quill*



You really can draw with your mouse as Andrew Wright discovers. As long as you've got Quill 2 that is...

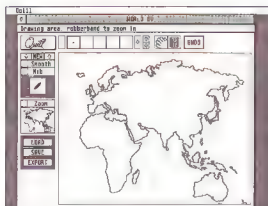


It's unlikely to double as a word processor but you never know!

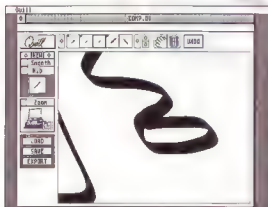
Computer graphics is becoming more and more sophisticated. You can create ultra realistic scenes in a raytracer, fake a photo of yourself shaking hands with the Queen in an image processing package or just get plain creative with natural media brushes like oils and watercolours. But can you draw a simple shape without it looking like a three year old's scribble?

Well I don't mind admitting that I can't. I can raytrace and retouch with the best of them but try to create a simple image for use as clip art and even the kids start laughing. That was before Quill came along, of course. Or to be more precise since version 2 came along. The first version of Quill was specifically aimed at owners of the Tabby graphics tablet but Quill 2 can now be used more easily with an ordinary mouse, making it a better buy for users reluctant to spend £49.95 on a Tabby. Incidentally it also adds support for another low-cost tablet, the Wacom Artpad.

In essence Quill emulates natural drawing tools using shaped or italicised nibs and a smoothing algorithm to make the mouse behave the way you want it to and not the way it does in practice. If you've ever tried signing your name or drawing something freehand in a paint package, you'll know just what I mean.



Quill 2 is ideal for tracing when used with a graphics tablet.



Up to 16 times magnification can be achieved for fine detail.

The program is supplied with a 15-page manual with a single sheet update attached to it. The distribution disk includes some special Tabby drivers and configuration accessories as well as patch program to make it work properly with NVDI.

Down to business

Quill 2 has a functional attractive interface with a large drawing area and some iconic tools along the top and to the left. A status window at the top provides on-line help.

To draw with Quill 2 you click on whichever pen nib you want to use and then start applying pen strokes in the main window. Each stroke is recorded on screen very much like a

vector object although you can't edit it in quite the same way.

You can alter the shape, size, angle and structure of the nib by pressing the space bar or the right mouse button and then pressing the mouse pointer on the nib icon. Clicking on rotate or squash nib allows you to move the mouse or Tabby pen

until you get precisely the shape and angle that you want. You can also create and store up to 32 different nibs and they can be magnified when installed in the tool bar along the top, making them easier to see.

Drawings can be edited stroke by stroke. Although the only way to change the actual shape of a stroke is by applying

a new nib to it, you can move or delete existing strokes at any time. While a little clumsy – you have to draw a rubber band to select a stroke – it works well enough.

Quill exports drawings in bitmap IMG format, despite the vector style strokes, though you can save part-finished drawings in a proprietary format for further editing. You can specify the exact size you want the image to be, its resolution in dots per inch and

whether it is to be portrait or landscape (if you want to save the entire page). There is no print facility but with Imagecopy 3.54 or later

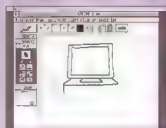
installed as a desk accessory at the same time, direct output is possible. Note that you will need at least a 1Mb machine for this. The other alternative, of course, is to save your work and then

load a program like Imagecopy or GEM-View to print it out.

Quill 2 isn't the be-all and end-all of art packages but it does allow you to create unique things on screen. It may lack a number of features – I'd like to see colour support for example – but on the whole this should appeal to a lot of users, professionals and amateurs alike.

Step by step clip art

If you've ever tried hunting through a collection of clip art images looking for just the right one, you'll know how useful it would be to be able to create your own. It is much easier to draw in Quill than in ordinary paint packages because of the smoothing effect and the configurable nibs. In this example, I've drawn a computer as part of a logo for a colour brochure.



Quill makes it very easy to create clip art. Here a small rounded nib is chosen and the first few strokes of the graphic are drawn.



The rough and ready appearance of Quill clip art can be very attractive from a design point of view. This drawing took minutes to do. Once the drawing is complete, the nib can be tweaked for just the right effect.



Once the finishing touches have been made, it's time to export the drawing. The first thing to do is define the area of the image you want to save using the mouse.



The export dialog box lets you specify the exact size of the image and the resolution of your printer so that it can be made to fit your requirements exactly.



The IMG file is then used as part of a colour logo created in GAI's Picture.

QUILL 2

Publisher: CGS Computerbild
Contact: 0171 670 7307
R.R.P.: £29.95
Requirements: Any Atari, 0.5Mb or more memory, mono or colour

Pros: simple drawing area • combined interface • easily configured
Cons: limited export • no direct printing • no colour

Big Blast



Offir Gal puts the second version of ScreenBlast through its paces.



and although these produce noticeable flicker, you may find them useful for viewing colour images. There is also support for a virtual screen of up to 3000*4000 pixels, and scrolling is very smooth, especially in mono mode.

A point that is often forgotten is that extending the screen resolution slows the system down, this is hardly noticeable in mono mode but gets very frustrating in 256 colours. The speed is affected by a combination of screen dimensions and refresh rate – the higher these are the slower the machine.

This is a limitation of the Falcon, not ScreenBlast!

New for two

ScreenBlast 1 was designed mainly for multiscan monitors. The preset resolutions for standard VGA and SVGA monitors were rather limited and there was no way of configuring the software to produce more useful screen modes with these cheaper monitors.

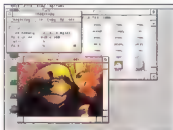
This problem has now been addressed in the form of the Video Mode Generator (VMG) which allows you to create custom screen resolutions. Written by the NVDI authors, this is certainly very powerful but complex to use as such parameters are usually the domain of hardware engineers. Yet with a little help from the manual, and thanks to a relatively friendly interface, I created a mono resolution of 912*688.

The other major improvement is in the start-up screen which is now GEM-like and uses standard pop-up menus and buttons. Also, a simple screensaver, called Screenblinker, is now included in the package. While this is very basic, simply dimming the display after a specified time of inactivity, it uses very little memory.

Verdict

The bottom line is that if you own a Falcon and a multiscan monitor, ScreenBlast will help make you more productive. Version two's improved software simply makes the product that much more desirable.

Before and after – ScreenBlast works by increasing the number of pixels shown on your monitor; text and icons appear smaller. The standard 640*480 resolution is above while ScreenBlast, running at 800*556, is below.



The Falcon can display non-standard screen resolutions, but for reasons known only to Atari engineers, these capabilities are well hidden – even from programmers! But the Overseas team dug deep into undocumented areas to produce ScreenBlast.

ScreenBlast 2's hardware is essentially the same as version 1. A small adaptor takes power from one of the paddle ports on the left side of the keyboard and plugs into the monitor port at the back of the Falcon.

You select your monitor via the configuration dialogue box with several preset types to choose from. If your specific monitor is not listed, you should be able to select an equivalent by checking your monitor's specifications.

Once installed, ScreenBlast reveals itself after a reboot. Just before

the desktop appears, a GEM-style dialogue box displays from which you can select the screen resolution to run at. You can choose between 2, 4, 16, 256 and true colour with screen resolutions between 640*480 and 1280*960 depending on your monitor's capabilities. The same dialogue box appears whenever you reset or change resolutions and can be configured to a default resolution if required.

Screen resolutions

The preset resolutions for non-multiscan monitors are a little disappointing in comparison with BlowUp30, which is surprising as the Video Mode Generator is capable of creating better ones as you will see later.

With a multiscan monitor you can select resolutions beyond 800*600 without any problems, although text is just too small on some 14" monitors (the maximum comfortable resolution on such a monitor is around 720*512).

ScreenBlast can use interlacing to achieve even higher resolutions.



Some of the preset resolutions available for a multiscan monitor though not all can cope with the rates and frequencies here.

SCREENBLASTER 2

Manufacturer: Overseas UK Distribution: COMPO Software

Contacts: 07487 773582

RRP: £59.99

Requirements: Falcon, 1Mb memory (more recommended), SVGA (multiscan) monitor recommended.

Preset: New, made product • reliable in use • fully configurable

Comments: Could do with more presets • Video Mode Generator is difficult to use

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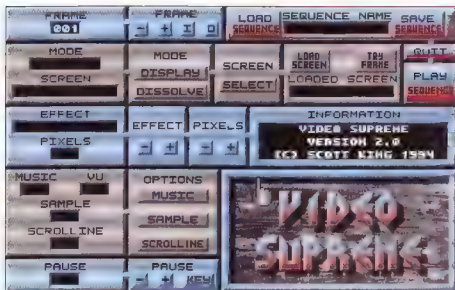
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The Supreme



Andrew Wright upgrades to the second incarnation of Video Supreme, the budget priced video titler...

When Video Supreme first appeared, it offered some staggeringly creative effects that didn't

require a massive hardware investment. Indeed it ran quite happily on a basic 520! As a video titler, it was designed for generating intro sequences for video tapes. It featured a wide range of dissolves and wipes that could be combined with your own low resolution screens, and sound samples to create lengthy animated sequences such as titles and credits.



Not everyone wants to create video intros, of course. In fact, I'd bet a month's beer money on the fact that a good proportion of existing users never take Video Supreme anywhere near a video recorder. Video Supreme is much more than just a video titler - it's a real multimedia experience and great fun to play with. You can create demos and show them off to your friends or build up slide shows with special effects using digitised or scanned pictures of the family (and anything else you've collected over the years, for that matter). You can also use rolling demos

The main Editor module is where you cook up our sequences - Video Supreme's equivalent of the kitchen.

as adverts for your goods and services, intros and instructions for your own software, and boot sequences for disks.

Video Supreme 2 adds a lot of extras. The basic interface is much the same, so no new learning curve again. Version 2 supports sequences up to 200 frames in length and sound samples up to 200Kb in size from 6-20 kHz. It now offers chip music as well as the samples and there's graphical VU metering to get it just right.

The author has added many more ways of displaying and dissolving screens with overscan and even semi-automatic animation effects. Text can be scrolled on and off the screen in a variety of ways too.



Why not add some music? The two supplied support disks have loads...

How do they do that?

Enough of the what - let's have some how. Video Supreme has six main elements or modules. The nub of the program is the Editor module where you do all the real work - import screens, specify how to display and dissolve them,

Need some help? It's right there in the help module, funnily enough.



Winner



add time delays and samples or music, and test each frame individually.

From the main menu screen in the Editor you can access three smaller screens to handle samples, music and fonts and apply more settings and effects. For fonts you can tell the program where to start the message (contained in a text file) scrolling across the screen, at what speed and width. There aren't that many fonts supplied with the package and some are hard to read but the bar font is superb – I love it!

The music screen offers a number of options, mainly revolving around how and when it should be played during the frame cycle. This is important because you might want a drum roll to start while a screen appears, for example, or a thunderclap to coincide with a flash of lightning. There is also an option to flash colours when the music plays. The sample screen gives similar control over sampled sound. The program recognises 19 different packed file formats and there is a separate Music Player module for testing and timing them.

Next comes the Frame Creator, a clever little gadget that lets you create semi-automatic animations and effects similar to morphing. For example, you add a screen to the list, select an effect such as zoom and the next four frames are created by repeatedly zooming in on the original. The four new screens are then saved to disk. The warp effect lets you wrap an image around a shape and can be used to create things like spinning globes. Digitised or scanned images with more than 16 colours can also be imported and are turned into

If you've got a sampler cartridge you could even add your own voice to the intro.

The file selector. No comment – absolutely no comment...

greyscales but keeping back half the palette for overlays.

Another module, the Sequence Preparer, is used for putting together sequences on disk and specifying how they behave. A freeware runner program is supplied so you can give away your work. There is also a Quick-Try module that controls sequences while playing to video or plays sequences with large samples that can't be replayed in the Editor due to lack of memory.

Verdict

The interface is pure STOS and about as non-standard as you can get. There are two different file selectors and they're as bad as each other – I'd much prefer the standard GEM one but at least the custom versions make life a little easier when tracking down samples and screens. One thing about the interface as a whole though – it's almost entirely mouse driven so you can be up and running in no time at all. Incidentally, the sixth module is a Help one with annotated screens for those who find it difficult. Useful that, especially as the manual is a bit of a disappointment, in 88 pages there isn't a single screenshot so you've got to wade through with the program running to have a chance of understanding what's going on.

Video Supreme 2 isn't a total solution – you need an art package to create the screens in the first place and a sampler for recording speech and other



Thanks for the FX

There are no less than 75 special screen effects in Video Supreme 2, which gives you some idea of how creative you can be. Most of them can even be configured individually so the real number probably runs into the hundreds!



There are more ways of getting things on and off the screen than you can shake a stick at – this one appears as a jumbled mess and then gradually unscrambles itself from the left to reveal the screen.



How about the rotter blind effect? Great for dissolving screens away.



Special effects can be created by scrolling text across the screen at the same time as background animations are going on. The whole process is extremely smooth.



This font is just the best knees

effects – but it comes pretty close. For a program that runs happily in 1 Mb of RAM, it can achieve an awful lot. As a stepping stone towards multimedia, that elusive subject we hear so much about, Video Supreme 2 is 30 quid very well spent.

VIDEO SUPREME 2	
<p>SAMPLE</p> <p>MUSIC</p> <p>SCROLL LINE</p> <p>Publisher: Goodman International Contact: 01782 33550 RSP: £29.95 Requirements: ST/Ste, 1Mb or more memory. <i>low resolution</i></p>	<p>Pros: Blinding special effects • easy to use • good sound handling Cons: Mediocre manual • odd interface</p>

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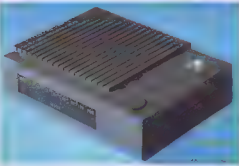
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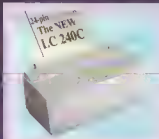


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external power supply unit	157.90
internal power supply	53.90

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

Market upgrades for the SHRM are just in and require no ordering providing MNU and Shiller chips are supplied (phone for details)

The Market Board allows connection of standard "SABM" memory boards (see prices below).

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All SIMM upgrades come complete with test disk and instructions. Most SIE's are complete with SIMM's. However please check listing boards before ordering.

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x 250K SIMM's	\$4.95
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x 1Mb SIMM's	\$79.95
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References

Trust FAX Modem £12.99

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11. *Journal of the American Medical Association*, 2000; 283: 2686-2692.

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Tel: (01772) 203166

From Mini to Maxi

Hot on the heels of its award-winning MiniS hard drive, System Solutions heads for the big time. Ofir Gal follows...

Hard drives are big business now, and System Solutions has just unleashed its latest model - the MaxiS. The package includes the excellent HD Driver hard disk software, well known for its speed and reliability, and an optional host adapter for ST owners.

The MaxiS is slightly larger than the MiniS and is made of metal rather than plastic. The unit is designed to stand upright and measures just 250 x 130 x 75mm. Usefully, it is capable of housing two 3.5" height drives. System Solutions has a range of configurations to offer ranging from 120MB to 1.0GB standard fixed drives, as well as removable drives using either MQQuest or



The MaxiS holds two 3.5" units - hard disk or removable.

Magneto-Optical technology

You can even have a combination of the two, which is ideal for backing up the data from the fixed drive to the removable. All drives are of the best quality from Quantum, Micropolis and Fujitsu. AV drives, suitable for hard disk recording, are also available.

A quiet fan is built into the unit with an optional heat sensor to control fan speed. The MaxiS features a power-on light and an

activity indicator. Two SCSI ID selectors are located at the back along with a dual SCSI port and a power switch. The ability to add a second device is a definite winner that will save you money in the long run. Drives come formatted, partitioned and ready to use. Yep - looks like another winner.



MAXIS	
Manufacturer: System Solutions Contact: 0181 693 3355 RRP: From £229 for 120MB unit (add £40 for 1GB unit) Requirements: Any Atari computer	Pros: Sleek and modern design • can house two drives • excellent software Cons: More expensive than the MiniS

Degasart 3

Andrew Wright brushes up on his art with a new tutorial package.

If you've ever seen all those wonderful computer graphics in game intros and demos and wondered why your own masterpieces look nothing like them, Degasart might just interest you.

Degasart is the third in a series of graphics tutorials aimed specifically at ST owners. It shows you how to make the most of a 16 colour system, use patterns and so on to create the impression of more colours and how to do things like anti-aliasing, dithering,



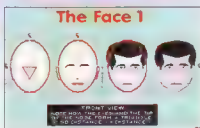
Drawing a face is easy when you know how...

colour-cycling, random and repeat patterns. It also devotes plenty of time to showing you how to create lifelike scenes, draw people and objects and to work with text. Although based around Degas Elite it isn't necessary to own that particular paint program as the hints, tips and techniques are all universal.

Although you don't need disks 1 and 2 in the series either disk 3 contains a number of references to earlier tutorials

so it might be worth considering doing for the full set. Each disk contains 40 images and tutorial screens plus related text and the two media are linked using a hypertext-style viewing utility. There are also 14 GDOS fonts included ready for use in Degas - complete with the right ASSIGN SYS files.

Many of the lessons in Degasart 3 revolve around text effects using GDOS and SpeedoGDOS fonts. Other specific topics include figure drawing, construction of faces, using grids to copy images from other sources and how to fine tune parts of an image using anti-aliasing and smoothing. The text is a little light and some lessons rely too heavily on example rather than real instruction. On the other hand, the author certainly knows his stuff. If you don't, this looks like an excellent way to start.



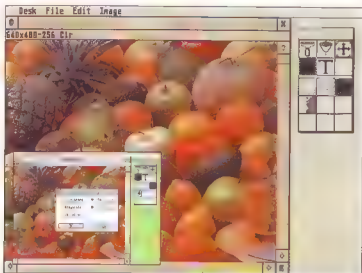
Anti-aliasing is the only way to beat those jaggles.

DEGASART 3	
Publisher: Floppystop Contact: 01224 586208 RRP: £15 (for 1-3); £8 for 3 only Requirements: Any Atari, 0.5Mb or more memory, medium resolution	Pros: Something for everyone • point and click access Cons: No in-depth explanation

Positive thinking



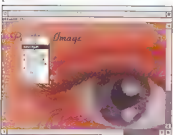
Positive Image promises simple pixel manipulation for the masses. Nial Grimes takes a sneak peek...



Nothing short of a revolution has taken place in the Atari image processing arena over the past two years. Spurred on by the release of the Falcon, software publishers have fallen over themselves to offer more and more powerful software.

Floppystop have opted for a different approach. Positive Image isn't out to steal any crowns – it simply offers the basics, bundled tightly with a few original extras. Let's see whether the vision has put off.

Positive Image is part of a new breed of Atari software that's happy to run on just about any ST yet still takes full advantage of the extra power offered by the Falcon. Many of the effects filters are accelerated by the DSP and all screen modes, from mono to true colour are accommodated with panache.



Bezier and auto-traced blocks add muscle to Positive Image's spec sheet.

(Inset) Filters can be applied to any image thanks to the internal conversion facilities.



Text and images can be easily combined when GDOS is installed.

A single floating icon panel contains all of the vital tools and the remaining options can be found nestling comfortably in the menu bar. The sparse interface is very deceptive. At first it's hard to get too excited about the level of power on offer but that does change with time. This is partly down to good integration (in the case of block handling) but some obscure keyboard commands don't

help out much in other areas. However, the interface is currently being tweaked, so it may not be a problem in the full release. Some irritating bugs are also being ironed out as we speak.

Pixel-bashing

Given the sheer number of image formats used on the Atari platform these days, it's nice to find that a reasonable amount of files can be loaded without resorting to GEM-View or Imagecopy JPEG, TIFF, NeoChrome and many more besides are all detected automatically and once loaded, can be converted to a different colour depth – this is particularly handy as the filters only work on greyscale or 24-bit images.

A range of six standard filters are built into the program itself, and plenty more can be loaded as modules from disk. Braver pixel-bashers will no doubt relish the opportunity to edit filters directly through a friendly dialogue box. The overall speed of the program varies from acceptable to reasonably fast – intelligent screen updates help out when switching between multiple images, but both loading and filtering are a bit tardy.

When it comes to block handling, Positive Image is a bit of a wiz – rectangular, elliptical and bezier blocks are all

covered for and it can even trace around areas of solid colour automatically. Naturally, sections can be cut and pasted between windows, and filters are easily applied to specific areas of an image. A range of overlay effects is also provided and blocks can be rotated, scaled and warped in a number of ways. This excellence is complemented by an 8-bit masking system of sorts.

The preview is nearly at an end and we still haven't mentioned colour printing, virtual memory or the GDOS font support. Other neat touches, such as window minimisation, lend quite a modern feel to the whole application.

Despite some niggles, Positive Image is shaping up into a solid contender in the budget image processing market. The package is rough at the edges right now – which is only to be expected at this stage – but a few features have yet to be added and the vital signs are looking good.

"When it comes to block handling, Positive Image is a bit of a wiz."



An infinite variety of effects are possible with the help of the edit filter dialogue box.



Publisher: Floppystop
Contact: 01224 588208
MSRP: £24.95
Requirements: Any Atari, 1Mb of memory minimum (2Mb recommended), hard disk recommended.

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Pinball has a special place in the heart of every arcade fanatic and one game has become synonymous with authentic ball-bouncing

action – Pinball Dreams on the Amiga. Before its initial release several years ago, nobody imagined that a computer game could capture so much original atmosphere – in fact it pretty well re-defined the genre. After months of rumours, a finished Pinball Dreams for the Falcon is finally with us in the flesh. Let the nostalgia fest commence!

Pinball Dreams is very much a traditional affair, and each of the tables look as though they've been dragged directly from a '70s arcade. Four tables make up the game, each with a specific theme and goals. Ignition is set in space, Steel Wheels takes you on a trip into the Wild West and Beat Box uses music as its theme while Nightmare is thoroughly sinister, in both looks and atmosphere.

Space travel is the theme of Ignition – light all of the letters to net an extra ball!

Evil sound effects and sombre graphics contribute to the atmosphere of the Nightmare table.

The sound effects play a big part in Pinball Dreams – all are themed to suit the tables.



Obsession's first real challenger has arrived in the form of Pinball Dreams. Armed with a healthy collection of Tommy lyrics, Nial Grimes gets down to serious pinball...

Simplicity has always been pinball's main strength and Pinball Dreams continues the tradition – new players can bash the ball-bearing around while seasoned hacks can go for the big bonuses. Of course, there isn't much to aim for beyond a truly enormous score and a free ball, but that's never posed much of a problem for original arcade fans.

In terms of control, the Shift keys become flipper buttons and you can give the table a nudge by prodding the space bar. A good dose of caution is needed, though, because too many nudges lead to a penalty and the flippers pack up. And so, the Falcon can't remove you forcefully from the room!

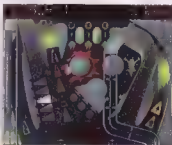
Lots of gloss

Enough gloss has been added to make the whole experience enjoyable. Useful messages scroll across an authentic display and graphically it's nicely done, although not up to Obsession standards.

The sonics also back up the atmosphere of the tables well, from the bubbly music that trickles along behind Steel Wheels, to the menacing tune used in Nightmare. Evidently, these have been ported directly from the Amiga, but the quality is reasonably good. Unfortunately, some parts of the game are marred by a slight crackle

from the speakers. Additionally, the current version of the game only runs on RGB monitors, but a VGA release should be available by the time you read this review. Let's hope they ditch the manual protection.

Pinball Dreams is about as close as you can get to a traditional pinball experience on the Falcon. Waves of nostalgia come flooding back as you get quickly sucked into addiction and it is very playable. If Obsession hadn't already taken the world by storm, we would be looking at a winner. However, the fact that the STE can perform similar – and better – tricks does take the edge off the encounter, and you're left with the nagging feeling that Obsession on the Falcon is going to offer more. Even so, it is a quality game and given a few plays, you are going to have trouble stopping those flipper fingers.



PINBALL DREAMS	
Publisher: 21st Century Entertainment UK Distributors: 16/21 Contact: (01834) 710788 RFP: £24 Requirements: Atari Falcon030, RGB monitor (check regarding VGA)	Price: Traditional gameplay • good play mechanics • slick gameplay Cons: Slightly flawed sound • not an Obsession beater • manual protection

Captain Sensible

A good view of the pitch is used and the players are nicely animated despite their size.

Impact Software's Sensi-bashing soccer game has a mud-caked Nial Grimes checking out virtual cheer-leaders...



overhead approach with a nice large view of the pitch. The fire button forces a player to pass or tackle in the usual fashion and the player nearest the ball is always under joystick control.

Only in one area does the game deviate from the standard formula. Instead of kicking the ball and then deciding where you want it to go, Team forces you to decide as you press the fire

button. Digitised thwacks and thuds rise above the noise of the crowd and add atmosphere to the game and the title music is equally impressive.

Goal!

Team is unashamed in its attempt to blow Sensi out of the water and in some ways it succeeds, you've got a game that plays well, and is backed up by enough technical achievements to give the Terminator 2 team the frights. Impact is currently adding a few finishing touches, by the time the game hits the shelves next month, it should boast weather conditions, a kit design studio and several other auxiliary features - league and cup competitions among them. The game is happy to run on

Kick Off changed the face of gaming - there is no question about it. Nothing before had captured the sheer excitement of sport on screen and it's still one of the best ST games ever released. The basic Kick Off ethos of fast action and a good view of the pitch was continued by Sensible Soccer, which has remained the undisputed king of ST soccer games, until now, we are told. Yes, Impact really do believe they have created a game that will blitz Sensible.

But Team is more than just a Sensi wannabe - it's been written for the STe from the ground up, and oozes class from every pore. I won't bore you with too many technical specifications, but suffice to say that the scrolling is smoother than a politician's patter and is backed up by sound effects running at a full 50kHz. The STe just can't do any better than that.

Dribble, dribble, dribble

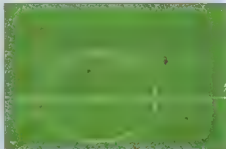
Anybody who has played Sensi or Kick Off will be immediately at home with Team's format. It uses the standard

Team is more realistic than Sensible Soccer and the new system can take some time to get used to.

The crowd react loudly to any exciting play and are lightly animated for a life-like effect.

button - a realistic system that does take some getting used to. The play environment has been lavished with similar attention. Never does a low ball pass through players and you can forget about that ballistic kick going into the net - it will simply sail over the bar as it ought to. Try hard enough and you can even bounce the ball off the cross bar, in true world cup style. Overall, the gameplay is more true to life than Sensible, but it's also slightly more complicated - I'll let you decide whether that's a good thing or not.

The graphics slide neatly into place behind these play-mechanics. Look closely and you'll notice that the well-animated sprites are slightly bigger than the one used by Sensible, but you see no loss of the pitch because Team has been



The gameplay is fluid and fast thanks to the STe's hardware scrolling abilities.

both the STe and Falcon, but a Falcon-enhanced version will be released later in the year.

Team is shaping up into a hot product. The technical aspects of the game are beautifully done and push the STe to the point of destruction. Here's hoping that Impact can squeeze enough features around the edges to send Sensible and Kick Off into the relegation zone.



Publisher: Impact Software
Contact: 01280 850450
STe: £14.95
Expected Release: April '93
Requirements: STe, TT or Falcon/G40, 1MB of memory

Cannon Fodder

The irreverently titled Cannon Fodder finds its way onto the Jag. Iain Laskey marshalls his little men and gives them their marching orders...

Cannon Fodder is the very first Jaguar title from Virgin and as it has been released on just about every other platform – including the ST – it needs little introduction. When you first start the game, you are treated to a bouncy theme song that's rather reminiscent of *Ace of Base*. Press the fire button and the military mayhem begins.

The game consists of 24 missions, each with up to 6 phases. Each mission requires you to destroy various targets. In order to finish and, once you're through, you can save your current position. With so many missions to get through, this is definitely essential.

You start off armed with machine guns but you can bolster your kit with the grenades and bazookas you pick up along the way. These can be a bit hard to use in the heat of battle though, requiring you to hold button B while pressing button C. As in real life, you've got to be cool under fire.

Each enemy soldier is dispatched with a blood curdling variety of screams and groans and even the buildings explode with satisfying amounts of flame and debris. Later missions add new features including a variety of vehicles. These are a bit tougher to kill although you can always board them yourself and turn the tables on the



enemy. It's a hell of a lot better than the *Supa Dupa Boostas* which add such cute things as heat seeking missiles and bullet-proof vests for your troops.

There are five different terrain types: jungle, arctic waste, desert, moorlands and underground. Each has its own set of features and traps. The enemy comes in different varieties too. It can be embarrassing to pick on a single enemy with your team, only to find he's armed with a bazooka or grenades.

The graphics are small but detailed with lots of humorous animations as dead bodies bounce around, exploding trees fly across the screen and your victorious troops jump up and down.

The sound is excellent from the intro tune to the various background noises like trickling water, howling wind and the jungle.

A line of eager recruits await your instructions at Best NRM – poor beggars!

Promotions are handed out at the end of each level and the manual includes a key to the ranks.



cacophony. The graphics seem to be unchanged from the computer versions. The shading is fairly coarse with few colours being used. Even the ray-traced stills look like they haven't been updated. The Jaguar is capable of much better than this – it's a pity Virgin didn't see fit to improve the graphics.

I found the controls a bit tricky at first though things improved after a while. It really gets frustrating when your troops get stuck behind an obstacle and you have to fiddle about trying to get the right angle to free them again. On the whole, I still think the game is more suited to control by mouse.

Verdict

Where this game really scores is in the "just one more go" stakes. Every time you die, you just know you can do better next time. Each level adds new features and when trip wires blow you up, you just have to try again until you find the best way to complete it.

Cannon Fodder won't get top marks for its ported graphics but when it comes to sheer addictive gameplay, it's a thoroughbred. It isn't a game that'll have your friends oohing and aahing but when they do come round to see it they won't be moving on in a hurry.



<p>PUBLISHER: Virgin Interactive Entertainment (Europe) Ltd CONTACTS: 0181 660 5900 RSP: £49.99 REQUIREMENTS: Atari Jaguar</p>		<p>PROS: Addictive gameplay • cute tune • good sound effects CONS: Graphics could be better • sprites too small</p>
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NVDI 2.5 *System Solutions' screen accelerator – the best!*

Quill 2 *Unique hand-crafted graphics program from CGS*

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Our thanks go to CGS, COMPO, JCA, Systems Solutions, Titan and T.U.S. for bringing you such a sensational competition of these leading-edge Atari products – the best in their class.



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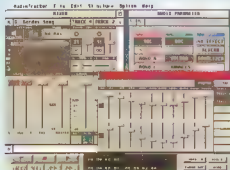
The answers to both questions can be found within the pages of **Atari Pro**.

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Now turn to page 44, write the answers in the "Falcon" box, fill in the survey and send it back to us!



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Best Software Upgrade 1993 & 94 - ST Review

Magic

"If you want a multitasking system that works simply and reliably, then Magic is for you"

ST Review, June 1994

Magic is a full TOS replacement, a very fast disk filing system, has accelerated serial, MIDI and printing routines and is, of course, a true pre-emptive multitasking system. Magic Desk, a replacement Desktop, and a powerful command shell are included. Magic runs on ST, Mega and TT computers with 512kb, but 2Mb is recommended for a useful working system. The Falcon version is expected to be available by July 1995

"It's like running an accelerator and getting the multi-tasking thrown in for free"

ST User, February 1994

Magic (RRP £69.95) Intro Price £39.95
Magic and Ease £79.95
Magic and Kobold £79.95
Magic, Ease and Kobold £119.95

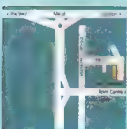
MB: Excellent with CEMAS SL. Compatible with Navigator Logic but not with Navigator SL and not yet compatible with CEMAS

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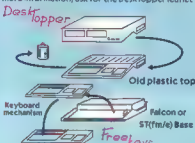
Kobold 2.5 (RRP £59.95)

Ease

Use your Atari with EASE. Replace the old Atari Desktop. This program could not be more appropriately named. The right click replaces the double click. Iconize windows for instant access to groups of files. Ease is aware of multitasking and comes with a sophisticated Colour Icon Editor. Works on any ST, all TOS versions, and with any display and graphic card. Ease (RRP £49.95)

DeskTopper

No space for accelerators, TOS boards, hard disks, graphic cards and PC emulators? Convert your Atari into a desktop computer with more space. Simply replace your plastic top with the DeskTopper and fit your keyboard into Freekeys for replace with a PC keyboard using AT-key. For more information, ask for the DeskTopper leaflet.



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19 Gigabytes of Compressed Data (UK)
Gemini (Atari/PD/Shareware) (US) £24.95
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ST: The Next

Do you want to unleash the full potential of your machine? Nial Grimes slips into his Star Trek costume and investigates the software and hardware that can change the face of your ST – full ahead both Mr. Sulu...

A timeless design is extremely difficult to achieve, but Atari struck gold when they dreamt up the ST. In many

ways, it's the Volkswagen Beetle of the computer world – a little quirky by modern standards, but still a remarkably usable machine. This long-term success is largely thanks to an efficient hardware design and an uncomplicated operating system. After all, the ST featured a fast,

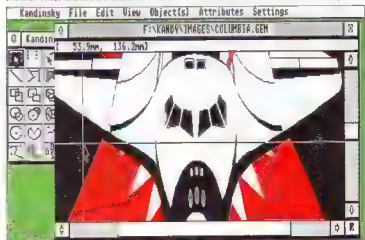
bitmapped screen display while PCs were still wallowing in the depths of text-based graphics adapters.

The ST's operating system (known as TOS), also lacks the baggage carried by its peers. This has a lot of benefits to the home user – if you don't need font support, there's no need to waste memory. In SpeedoGDOS and

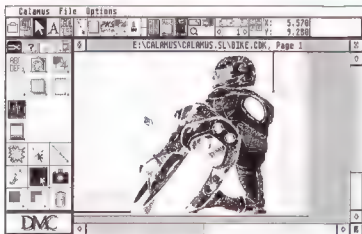
"You don't need to spend anywhere near £100 on software to have a good time"

much the same applies to networking and so on. All of these features can be easily bolted on to the ST, but they

The quality of modern shareware is astonishing – Kandinsky is up with the pros in terms of features



Generation....



don't guzzle valuable speed, memory and disk space when you don't need them.

This all adds up to a design that still has a lot to offer after ten years of active service. Even if you are getting itchy feet, there are plenty of ways to rejuvenate an older ST and keep it on top of the job in hand, and you'll be surprised at how little the whole operation can cost.

Introducing the hard line...

The words "computer" and "hardware" usually inspire thoughts of hire purchase and a healthy overdraft facility but, surprisingly, there are plenty of

hardware buys that don't demand mountains of cash. Even something as simple as a second floppy drive doubles the storage available to your applications and makes a huge difference when using software such as Timeworks. Bruin-numbing disk swaps are a thing of the past and when it comes to smaller applications, your program and data disk are instantly available at any time. External floppy drives are easy to come by, but Ladbroke Computing's Zvdec drive is well worth investigation at around the £50 mark.

If you find yourself using the ST's business personality more and more often, there are two hardware options

Given the right upgrades, an ST can even run Calamus SL and software doesn't come much more powerful than that!

Games galore!

Games no longer form the backbone of the ST scene, and the market has shrunk considerably over the past few years. But this lull has stirred some independent producers into action and we've seen a steady stream of outstanding quality titles appear. ST owners have been regaled by *Obsession* – a truly outstanding pinball extravaganza – and shortly *Team* will hit the market, boasting similar support for the "e".



Budget's entire range of games, including the excellent Douglas Rockmoor, is now available at PD prices.

Owners of standard STfms can also turn to budget software for entertainment. Many of yesterday's classics are available at outstandingly low prices and you can be sure that all play just as well as the day they were released. Added to that, Budget's entire collection of Jcencoreware games has recently been re-released as freeware (the distributors remain the same). This means that games such as *Douglas Rockmoor* are available at rock bottom prices (if you'll excuse the pun). Others aren't quite as memorable but your PD library should be able to point you in the right direction.



Team is just one example of the quality games that are now appearing on the STs.

Hardware Recommendations

A little money spent on hardware can improve your ST drastically. Check out this little lot...

Budget

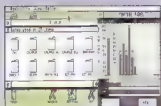
Second floppy drive A second floppy can't compare with a hard drive in terms of storage capacity, but it can still save a remarkable amount of disk swapping. Desktop copying becomes a pleasure and Thimeworks is transformed – all for £50.

Mid-range

High resolution monitor If you spend any amount of time in front of your ST, a high resolution monitor is well worth the dosh. The greater definition and clarity are well worth the £120 or so.

Professional

Hard drive Almost any hard drive will transform your machine, but System Solutions' Nixt wins hands down in terms of looks and practicality. It's available in a wide variety of sizes and comes with a two-year warranty.

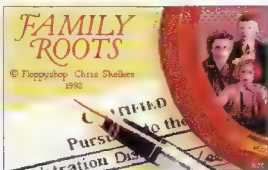


A hard disk provides acres of storage space and resigns sprawling disk collections to history.



Most professional ST applications benefit from a high resolution display – Calamus refuses to run on anything less!

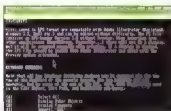
that really make sense – a replacement mouse and a mono monitor. The Atari mouse is commonly regarded as the most useless piece of hardware ever devised (easily edging out in front of the Ronco Record Cleaner) and a replacement is well worth the effort. A good quality, high-resolution mouse can cost less than \$15, and if you are worried about repetitive strain injury, a tracker



ball can be bought for around £30. Artists and designers might prefer the flexibility of the Tabby graphics tablet, which has recently been treated to upgraded software.

An equally good move for serious users is a high resolution monitor, which provides a much sharper and more relaxing image than the alternative of a TV or colour display. Atari's own monitor – the SM124 – is absolutely superb but sadly it is becoming more and more scarce, even on the second-hand market. Most of the larger advertisers in the magazine offer their own alternatives and you can expect to pay in the region of £120. System Solutions' SM14 is a safe bet but shop around to find the best deal.

If an extra floppy drive drastically improves the software you know and love, a hard disk can literally transform it. Enormous floppy collections instantly become a thing of the past as each and every package you use is moved within double-clicking distance. Most drives these days are fast, reliable and a doddle to set up. The range of suppliers is wide and Ladbroke, The Upgrade Shop, System Solutions and others all offer their own brand of drive.



The ST software scene is nothing if not diverse. From genealogy to cross-stitch, you'll find something to suit.

Protest combines power with a healthy turn of speed and it even runs well on a basic ST system.

Softly, softly...

Simply changing your software can give you machine a new lease of life. I wonder how many people are still struggling along with 1st Word Plus and blaming the lack of features on their ST? Open your eyes and you will find that the Atari can compete on a practical level with any other machine – Proteus may lack graphical niceties but it provides a truly awesome range of features and it's lethally fast on any ST with a megabyte of memory. Papyrus has also established itself as an excellent document processor and version 4 looks set to reinforce its position when released this year.

But you don't need to spend anywhere near £100 on software to have a good time. In fact, one of the main attractions of the ST is its portfolio of

Second thoughts...

Where computers are involved, "value for money" is purely a relative term – even budget products can seem expensive at times and depreciation is often frightening. Classified columns are an easy remedy for a thrashware wallet – you can buy just about anything on the second hand market and save an awful lot of money. As users upgrade their systems or switch to Falcons, they inevitably want to off-load their old equipment as quickly as possible.



Older packages, like Beggs Elite, can be picked up for buttons second-hand.

The first rule of buying second-hand is this: do not be tempted to pay too much. As a general rule, a used piece of software or hardware is worth about half of the purchase price, but bear in mind that you will need to pay a premium on very popular items. Never be afraid to make a low offer though – you can always counter more if it's refused.

Buying anything second-hand involves some risks and computers are no exception. When it comes to hardware, the main thing is to make sure that what you are about to buy is working properly. Software is less of a problem, but technical support is sometimes only available to the original buyer and you may well be out in the cold when it comes to upgrades or bug-fixes. That is a worst case scenario, but if in doubt, check before you buy and use any potential problems as a bargaining point.



Boot sales are a gold mine of classical ST software – games often sell for a couple of quid!

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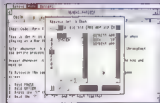
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attractively priced independent applications. Just about every type of software has appeared on the ST over the years. You can quite easily trace your ancestors with the help of Family Roots 2, turn your hand to embroidery with Easy Stitch, or bash out a quick tune courtesy of StormTracker and all of these examples slip into the sub-£30 bracket. Education is well catered for too – Goodman's newly released Art For Kids package is just an example of the quality titles that continue to appear on the Atari.

Smooth operator...

The ST's operating system is generally quite reliable, but older versions are beginning to show their age. Fortunately, there are several ways to bring your machine bang up to date. Atari's own TOS 2.06 improves the ST in many regards and maintains almost full compatibility.



If you've got enough spare memory to run several applications together, Geneva and Magic are a sound choice.



TOS 2.06 provides a much-improved desktop and also cures a few bugs!

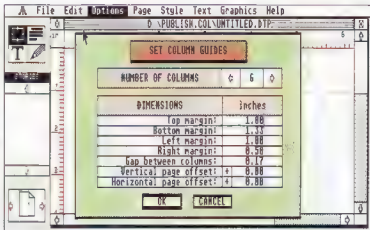
Alternatively, you can opt for a software replacement. The two main options available are Magic (written by the NVDI team) and Geneva. Magic is generally better specified but both are pretty damn good at their job. The compatibility ratio is a little lower than that offered by TOS 2.06, but you do get a bonus in terms of features (most notably the ability to run more than one application at a time). "Naughty" programs can still be run by simply booting from a floppy disk.

The ST has always registered strongly on the DTP/Richter scale and this is set to continue through 1995. Timeworks is still a remarkably strong contender in the ease-of-use stakes, and Easy Text Pro Vector even boasts SpeedoGDS support. You don't need to move too far up the price scale before some real power begins to appear. Calamus 1.09 chews its way through mono desktop publishing tasks with style, and DAV's Vector Lite will soon join the low-cost brigade. Both can be yours for under the magic £100, by quite some margin in the case of Calamus.

The advantage of both these packages is that they boast bigger brothers. You can experiment at a home level safe in the knowledge that the expertise can be carried on to a package capable of professional results. The latest release of Calamus SL even boasts many features conveniently "borrowed" from QuarkXpress on the Macintosh!

Naturally, the ST also boasts a healthy back-catalogue of other business applications. If money is tight, packages such as LDW Power and Superbase Personal are ideal – £100 can supply the pair for under £30! And when you want to move on to something more powerful, HiSoft's Twist is more than willing to take the strain in the database stakes.

And we haven't even mentioned the high-quality applications that continue to stream through shareware channels. Even the strictest budget can usually stretch to a ten or fifteen pound registration fee and most types of software find their way into the public domain in some form or another. Marcel and



Timeworks 2 is still a remarkably usable package, being both easy to learn and relatively powerful.

Software Recommendations

It's hard to compress the huge range of available ST software into three best buys, but you certainly won't go wrong with any of the following...

Budget

Obsession from Merit PDI. Obsession is probably the best games ever to grace the STe, and contains the very spirit of pinball. It's the sort of title that goes itself around your psyche and won't let go.

Mid-range

NVDI from System Solutions. NVDI gives the ST a shot of undiluted speed and accelerates most GEM applications beyond all recognition. If you use SpeedoGDS, consider version 3, which offers superb speed alongside support for TrueType and BitStream fonts.

Professional

Protext 6.5 from Arnor. In terms of speed and sheer word-crunching ability, Protext 6.5 knows no equal on the ST. At the new, low £74.95 price point, it's one of the best value word processors you can buy – well recommended if you can live without graphical comforts.



NVDI boasts graphical speed tremendously and is compatible with most GEM applications.



Obsession is pure class – if you are lucky enough to own an STe, I suggest you grab a copy immediately.

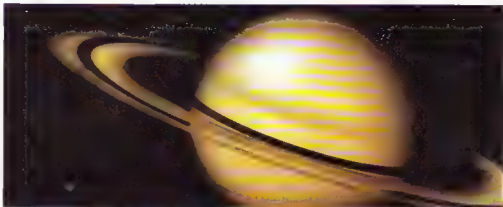
DB-Writer both make a good budget word processor, GEM-View and Speed of Light are both masters at graphics manipulation and the list goes on. One program particularly worthy of note is Kandinsky which has undergone major changes in the last month and now boasts Calamus CVG support alongside a whole host of other exciting features. DA's Vector had better watch its tail!

Up and over!

One of the biggest criticisms levelled at Atari over the years has been their failure to upgrade the basic ST. However, this lack of action on Atari's part has led to a thriving upgrade market and there are very few aspects of the ST that cannot be improved or accelerated in some way or another.

If you are using a standard 520 your first step should be a memory upgrade. This simple and inexpensive move will improve your machine in almost every area - even stepping up to a megabyte opens up a wide range of entertainment software and some professional applications. A two-megabyte expansion can cost under £70 and can also net some impressive rewards when running business software. Calamus 1.09 will rarely report an "out of memory" error given this much space and you can also begin to think about software such as Papyrus (though only with bitmapped fonts). The Marpet XtracRAM boards are recommended for conventional STs; the standard memory modules used by STe's are widely available and are a piece of cake to fit.

If your baby ST is used for more than entertainment, the next most important upgrade you can make is



"Your ST is capable of blazing performance..."

The ST boasts a wealth of shareware graphics packages - Speed of Light and GEM-View are in a class of their own

NVDI - the closest you can get to software go-faster stripes (GEM applications fly and the latest version includes a full Speed of Light replacement for use with applications such as Papyrus).

The time may come when even NVDI doesn't provide enough speed to drive your more powerful applications effectively. In this case a hardware accelerator such as the T28 or T36 is invaluable. The former costs less than £200 and yet increases raw speed by a factor of three. Bolt on the newly released Multiboard and you can think about enhanced graphics, a PC-style hard disk

interface and superb memory expansion possibilities. Even if you don't need the power now, it's comforting to know that your ST is capable of blazing performance - and much more.

The final frontier

Technically, the ST may no longer be on the cutting edge, but it's still an incredibly good all-rounder and the possibilities for expansion are almost limitless.

Yes, your ST's future is available right now in the form of upgrades, exciting new software and power-boosting hardware. Options start with a public domain disk costing a couple of quid and end with a command accelerator, graphics card, TOS upgrade and hard disk interface registering several hundred more, such is the flexibility of the machine you've come to know and love.

Believe it or not, the vast majority of ST users have barely scratched the

surface of their computer's potential. Hopefully we've given you a firm idea of where your ST stands and the improvements you can make for relatively little outlay. Remember, every journey of discovery starts with the first step, make that step!

Upgrade Recommendations

The ST is expandable in a wide variety of ways. Here are a few of the better options.

Budget

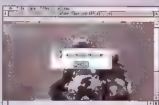
Memory upgrade In many cases, the more memory you throw at your applications, the better they will run. Even if you are not using power software, a simple upgrade to one megabyte from a supplier like Komp can open all sorts of software possibilities.

Mid-range

T-board TOS upgrade If you are still struggling along with an elderly ST, a TOS upgrade is well worth investigating. Not only does it fix odd as of bugs but you'll also get a much better desktop thrown into the bargain.

Professional

T28 Accelerator from System Solutions For a respectable speed increase with very few compatibility problems, the T28 from System Solutions takes a lot of beating. It's available for the ST or STe and is also fully expandable through the Multiboard.



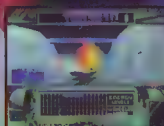
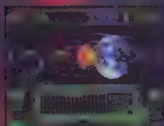
Banish those "out of memory" messages forever (well, at least ten minutes) with a cheap upgrade.



The above statistics show how a humble ST compares to the T28 - humble indeed!



The Battle for Earth has begun...



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ST User June 1994

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ST Format August 1994

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Atari World is contributed to, written by and produced by an enthusiastic, experienced team of Atari experts. We know what you want to read about, and you can tell us what you want to read about. We'll be glad to accept your comments, generally, your feelings about this magazine's content, or your suggestions for new features. We'll be glad to accept your letters of comment or criticism, or your suggestions for new features. We'll be glad to accept your letters of comment or criticism, or your suggestions for new features. We'll be glad to accept your letters of comment or criticism, or your suggestions for new features.

Atari World Survey, Unit 3 Green Farm, Abbots Ripton,
Huntingdon PE17 2PF

Con-
early

WHO ARE YOU?

- What sex are you?

- ☐ Male
☐ Female

- How old are you?

- ☐ 12 years or under
☐ 13 - 17 years
☐ 18 - 22 years
☐ 23 - 27 years
☐ 28 - 32 years
☐ 33 - 42 years
☐ 43 - 52 years
☐ 53 - 64 years
☐ 65 or over

- Where do you live?

- ☐ South East England
- ☐ South West England
- ☐ Midlands
- ☐ North East England
- ☐ North West England
- ☐ Wales
- ☐ Scotland
- ☐ Northern Ireland
- ☐ Eire
- ☐ Europe
- ☐ Rest Of World

Please tick one box unless guided otherwise.

WHAT COMPUTER DO YOU OWN?

- What Atari machine(s) do you own?

(you can tick more than one box)

- ☐ 520 ST/STM/STF/STFM
- ☐ 1040 STF/STFM
- ☐ 520 STe
- ☐ 1040 STe
- ☐ Mega ST
- ☐ MegaSTe
- ☐ TT
- ☐ Falcon
- ☐ Lynx
- ☐ Jaguar

- How much RAM do you have?

- ☐ 0.5Mb
☐ 1Mb
☐ 2Mb
☐ 2.5Mb
☐ 4Mb
☐ Over 4Mb

- What hardware do you own/intend to buy in the next year?

Own Intend to Buy

- | | | |
|--------------------------|--------------------------|---------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Second floppy drive |
| <input type="checkbox"/> | <input type="checkbox"/> | Memory upgrade |
| <input type="checkbox"/> | <input type="checkbox"/> | Hard drive |
| <input type="checkbox"/> | <input type="checkbox"/> | Printer |
| <input type="checkbox"/> | <input type="checkbox"/> | MIDI system |
| <input type="checkbox"/> | <input type="checkbox"/> | Mono monitor |
| <input type="checkbox"/> | <input type="checkbox"/> | Colour monitor |
| <input type="checkbox"/> | <input type="checkbox"/> | TOS upgrade |
| <input type="checkbox"/> | <input type="checkbox"/> | Scanner |
| <input type="checkbox"/> | <input type="checkbox"/> | Modem |
| <input type="checkbox"/> | <input type="checkbox"/> | Graphics board |
| <input type="checkbox"/> | <input type="checkbox"/> | Accelerator board |
| <input type="checkbox"/> | <input type="checkbox"/> | Video digitiser |
| <input type="checkbox"/> | <input type="checkbox"/> | Sampler |
| <input type="checkbox"/> | <input type="checkbox"/> | CD-ROM |



• What do you use your ST for?

(you can tick more than one box)

- ☐ Word processing
- ☐ DTP
- ☐ Graphics
- ☐ Music
- ☐ Games
- ☐ Educational
- ☐ Communications
- ☐ Databases
- ☐ Home accounts
- ☐ Business

• What display do you use?

- ☐ TV
- ☐ Mono monitor
- ☐ Colour monitor

• How long have you owned your computer?

- ☐ Less than a year
- ☐ Up to two years
- ☐ Up to three years
- ☐ Up to four years
- ☐ Up to five years
- ☐ More than five years

• How much do you intend to spend on products for your computer system in the next 12 months?

- ☐ Up to £50
- ☐ £50 - £100
- ☐ £100 - £200
- ☐ £200 - £300
- ☐ £300 - £400
- ☐ Over £400

• Do you expect Atari World to directly influence your software and hardware purchases?

- ☐ Yes
- ☐ No

• Is this first issue of Atari World good value for money?

- ☐ Yes
- ☐ No

• Do you like the idea of having three separate magazines?

- ☐ Yes
- ☐ No

• Which would you prefer for Atari World?

- ☐ An optional Reader's Disk at less than £3 per issue
- ☐ A Cover Disk at about £4 per issue

• Which have been your favourite and least favourite sections in this issue of Atari World

(you can tick more than one box)

Favourite	Least Favourite	
<input type="checkbox"/>	<input type="checkbox"/>	News
<input type="checkbox"/>	<input type="checkbox"/>	Reviews
<input type="checkbox"/>	<input type="checkbox"/>	Features
<input type="checkbox"/>	<input type="checkbox"/>	Makin' Music
<input type="checkbox"/>	<input type="checkbox"/>	PD Arena
<input type="checkbox"/>	<input type="checkbox"/>	Comms
<input type="checkbox"/>	<input type="checkbox"/>	Programming
<input type="checkbox"/>	<input type="checkbox"/>	Q&A
<input type="checkbox"/>	<input type="checkbox"/>	Talkback
<input type="checkbox"/>	<input type="checkbox"/>	ST Source
<input type="checkbox"/>	<input type="checkbox"/>	Atari Pro

• How computer literate would you describe yourself as?

- ☐ Very
- ☐ Average
- ☐ Below average

• How have you found Atari World's editorial style?

- ☐ Too simple
- ☐ Just right
- ☐ Too complicated

ATARI WORLD

• If you previously read Atari ST Review magazine, how would you compare this first issue of Atari World?

- ☐ Much better than Atari ST Review
- ☐ Better
- ☐ About the same
- ☐ Worse
- ☐ Much worse

ST SOURCE COMPETITION

UVK

- The letters "UVK" stand for:

ATARI WORLD COMPETITION

Falcon

- Which German company has just launched a Falcon Mk II?
- Which other German company produces Cubase Audio?

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Name:

Address:

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In a previous review, Atari World's Andrew Wright had described it as "blistering good value" when it was priced at over £110 – without our software bundle! Andrew did not stop there in his praise: "a delight in action... best hand scanner for the ST... superb grey scales can be created for DTP... highly recommended", were just a few of his other comments!

We only have a limited supply of these scanners which are available on a first-come, first-served basis. If you want to order by post then please ring our sales team first to check availability. If we have stocks, you will be able to reserve your pack before sending in your order.

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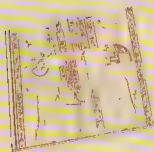
- Touch Up – industry-standard program for scanning and editing images.
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- Studio Convert – for converting your images into a whole range of different file formats.
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Full 12-month warranty

Papyrus 4

The Inside Story

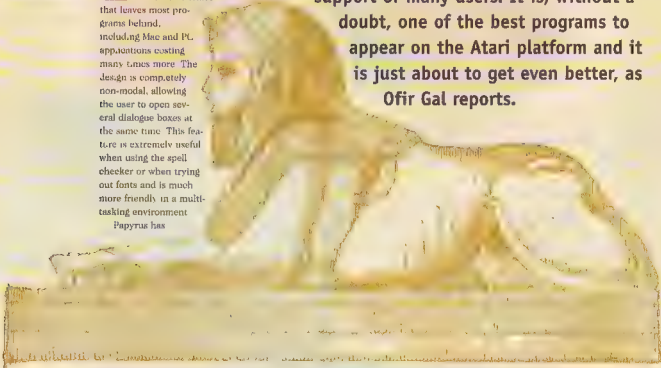


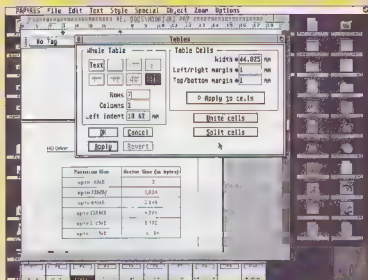
Papyrus has arguably grown to become the best word processing package for the Atari range. It has a user interface

that leaves most programs behind, including Mac and PC applications costing many times more. The design is completely non-modal, allowing the user to open several dialogue boxes at the same time. This feature is extremely useful when using the spell checker or when trying out fonts and is much more friendly in a multitasking environment.

Papyrus has

Despite the fact that Papyrus only appeared in the UK last year, it has already won the support of many users. It is, without a doubt, one of the best programs to appear on the Atari platform and it is just about to get even better, as Ofir Gal reports.





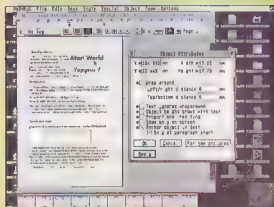
It is possible to create complex tables in Papyrus that include calculation between cells. This is useful for preparing VAT invoices for example.

feature or text analysis for correction of the most basic typing errors like double spaces and sentences that start with a lower case letter. The hyphenation function is not flexible enough and it does not work very well in English. Nor does Papyrus handle colour images although it can print coloured text.

To cap it all, Papyrus can be slow - operations like search and replace can take ages in long documents, but other functions such as printing are very fast. It also uses quite a bit of memory and requires 2 Mb or more of RAM. The whole document is loaded into RAM which can be a problem if your documents contain a large number of images.

The Future

The good news is that Papyrus v4 is currently under development. The program is being completely re-written and



The editing functions are all available when viewing the whole page on screen. Very useful for placing images and text boxes.

get on with writing the next document while it prints.

The layout features are impeccable and text and graphics can be moved freely around the page. Although Papyrus works best

no print preview mode. Instead, it offers something better. The document can be viewed and edited at any magnification. You can still move, enter or delete text and images in preview sizes. Papyrus has many DTP-like features too such as micro-spacing and adjustment of character width that are not found in other Atari word processors.

The program is multi-tasking friendly and is a clear example of "clean" GEM code. It works with almost any system modification. It even worked on the early test versions of Magic Mac. Being a Speedo based application it produces top quality output. Papyrus even manages background printing so you can

with NVDI 3 installed. It can also cope with old style GDS and Signum fonts.

There's no use in pretending that the program is perfect and has no shortcomings. Its handling of template documents leaves a lot to be desired. While it supports the concept, the implementation is cumbersome. It has no support for macros and lacks that basic writer's companion, a thesaurus.

Neither is there a word count.

ROM Software

The people behind Papyrus are Ulli Ramps and Christian Rieber. Ulli handles the business side of things and is also closely involved with the program design. Christian is the person that actually wrote the program that began its life, surprisingly enough, as a label printing utility.

Christian started programming on the 8-bit Atari machines. He studied computer science and specialised in artificial intelligence and user interface design. He even wrote a book about programming the 8-bit Atari.

Asked about the user interface in Papyrus, Christian explained: "One of my friends had a NeXT system and I was very impressed with the interface and how user friendly it was. As a result, the very first version of Papyrus featured non-modal dialogues".

Papyrus 1 was released in 1987 and non-modal design was a relatively new concept at the time. "I think that this is the best thing about Papyrus, it's user friendly," added Christian. "There is no point having thousands of hidden features that the user can't get at."

I asked Christian about his plans for v4, "I am now busy converting the code to C and most of the work is done. I am using the 8-GEM library on the ST and while I'm certainly writing an OS/2 version for the PC, we'll continue support and development of the Atari version".

It is interesting that they chose OS/2 and not Windows which is much more popular. "OS/2 is a young operating system and we like it - it's a well put together user environment to work in". Christian explained that he now writes the code for both platforms at the same time so that any new features will be available to Atari and PC users simultaneously.

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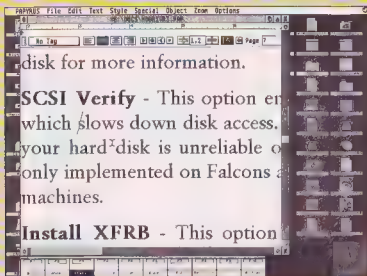
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We do not sell hardware or software - we just use it - there aren't many problems we haven't come across, but we're happy to hear of any difficulties you may be having - perhaps, together, we can devise some solutions.

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...at your service...



disk for more information.

SCSI Verify - This option enables a feature which slows down disk access. If your hard disk is unreliable or if you are only implemented on Falcons and machines.

Install XFRB - This option

In order to allow background printing, Papyrus optionally uses its own printer drivers. The program is supplied with a variety of drivers but you can even create your own.

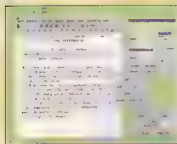


Viewing and editing is possible at any magnification. Here fine adjustments of character spacing are performed at a zoom ratio of 400%

image by reference rather than storing all image files within documents as the current version does. The current limit of 256 font families will be removed and memory requirements will be reduced. Colour image support is also very likely to be included in version 4



optimised in C. It is not well known but Papyrus 3 was written in GFA BASIC, stretching the language to its limits. Among many things, the re-write will improve speed and memory handling, making Papyrus much faster. The plan is to make Papyrus run on a 1Mb system too. The program will also be available for OS/2 (IBM's multitasking PC operating system)



The new version will be released for both Atari and PC and includes a host of new features. A new text statistics window showing word count and other information will appear. Papyrus 4 will support the full Speedo character set by using a new standard called UNICODE. The standard allows for a character set of more than 32,000 and will provide cross platform compatibility.

Version 4 goes a step in the right direction by allowing for integration with the dictionary and thesaurus functions of Localtel. Unfortunately, Localtel is not available in the UK.



Simple macros will also be available, allowing you to paste-in common phrases.

The page preview is also being revamped to allow display of two or more pages, side by side. Papyrus will also support automatic pair kerning and will have the option of

us.ng

Papyrus v4 was on show at CeBit in Germany, early March, running on a PC under OS/2.

What's non-modal?

When you select a menu or a button that opens a dialogue box, you are actually in a program mode. This means that you cannot do anything while the dialogue box is on screen. The menu bar becomes inaccessible and clicking anywhere outside the box produces a beep. Most programs use a modal design like this simply because it is simpler to implement - and over the years we've got used to it. There are no real advantages to the user except for some speed gain.



It is possible to use the Apply button to see the effect of your settings. Very useful when trying out different fonts for example.

Non-modal programs on the other hand, never put the user in a modal situation. You do not have to OK a dialogue box before you can open another one. The program never puts any limits on your actions. You can always do anything, even while it's printing. In practice that means that you can open the Font panel in Papyrus and see the document while you try out various fonts.

There are minor disadvantages to this system. Since you do not need to close dialogue boxes, you are likely to find your screen crowded with open windows. Windows also take a little longer to appear on screen.



Papyrus takes the non-modal concept further by allowing you to customise the interface. You have the choice of Atari style OK and Cancels buttons, the NeXT inspired Apply and Return, or both!

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It's not just a disk - it's one or more disks that go alongside each issue. Each month you get the option of buying the disk collection that goes with that particular issue. Each collection of disks will include a wide range of software including program listings, top PD and shareware, and yes - perhaps even some commercial software. Each month the cost of this will vary according to the number of disks when it's a one-disk issue, the cost for the disk will be £2.50. However if you subscribe "with disk", you will get all the disks that go with each issue for one fixed price - that's right, every time there is more than one disk you save even more.

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Where to,

MIDI?

Ian Waugh looks at what the future holds for MIDI file libraries.



MIDI files are a product of the musical technological revolution that the Atari ST helped to found. Countless numbers of entertainers use them for backing tracks for their acts and many more people like to experiment with them at home for fun, as a hobby. But soon, this may end.

The MIDI file is under threat. Yes, that humble MIDI file of this week's Number One record you bought yesterday may soon be a relic, a thing of the past. In fact, it may already be illegal.

The reason? A change in copyright laws. No-one, with the exception of the criminals who pirate software and MIDI files, would deny that a composer is entitled to reasonable recompense in

return for creative efforts. When you buy a cassette or CD, a percentage of the price goes to the artist.

Prior to the January 1, 1995, you could obtain a licence from the Mechanical Copyright Protection Society (MCPS) to produce and sell a MIDI file of any song. The MCPS consists of a handful of music publishers who effectively represent all the major players in the music publishing industry. In return, you paid them a percentage of the selling price, around 8.5 to 10 per cent.

This licence was not, as you might expect, a licence to sell MIDI files as such, but one to sell audio tapes - backing tracks. The MCPS had no licence to cover the new medium, and audio seemed the closest

Copyright rules OK

At the moment, the situation is far from clear and even the MCPS is



unable to shed much light on certain sections of the new laws. What is emerging is that the publishers want royalties for rights that, they claim, are inherent in a MIDI file. These include printing rights (because you can print a MIDI file as a score), adaptation rights (as you can change the pitch and tempo) and synchronisation rights (because special karaoke software can display the lyrics of a song on screen in time to the music).

The new royalties are to be 22 to 23 per cent of the retail price of the file or 15 to 15.5 per cent of the price if the file does not have an RRP. Technically speaking, all MIDI file licences prior to 1995 were not actually for MIDI files so any files produced before that time are not now licensed under the new rules and so are in breach of copyright.

In addition, unlike the blanket ruling whereby you could create a file of any song, you must now obtain prior approval for each song you want to arrange. Many popular artists – or their management or publishers – have already refused to allow any of their material to be arranged as a MIDI file.

These include Andrew Lloyd Webber, Billy Joel, Dire Straits, Haddaway, Lenny Kravitz, Mike Oldfield, Pet Shop Boys, Peter Gabriel, Simply Red, Take That, Tasmin Archer, Turrentine, Trent D'Arby, The Doves, The Pretenders and Vangelis among others. This means – just to spell it out – that it is illegal to sell a MIDI file of any song by these artists.

More please

So is the increase in royalties a fair and just amount? That depends on which side of the money box you're sitting. The MCPS says it is trying to obtain the best deal it can for its members – a worthy aim and the increased royalties reflect the additional rights buyers get. But who says the percentage accurately

reflects this? Yes, the MCPS.

Note that it is the potential use of the MIDI file that you are paying for, not the actual use you put the file to. But as one MIDI file company remarked, "Making people pay for the potential of a MIDI file is like locking up someone who buys a gun because it has the potential to kill."

Says Roland's Alan Townsend who, as Business Development Manager, is heavily involved in this market: "The changes will make the currently reasonable royalties quite excessive and it would be a pity if this stifles the creation of good data."

He continues: "It is ironic that, while no one denies that music can be printed from a MIDI file, I don't know of anyone who actually does so. Most of the identified markets for files have no need for print and in any

case expensive software and a high degree of skill is needed to turn the digital file into a readable score."

Feelings about the new rules run high in the MIDI file fraternity. Not least because of a slow response from the MCPS and the uncertainty still surrounding the situation.

According to Heavenly Music, MIDI file libraries were promised a 7-day turnaround on clearance of titles. Some 4,000 of Heavenly's titles are still awaiting confirmation after two months. Said Heavenly's Joe Ortiz: "You feel as if the last four years of your work has been flushed down the toilet."

Some members of the MCPS, such as EMI, are even breaking away and negotiating their own royalty deals. If this becomes a trend, a library may have to contact half a dozen publishers to fulfil a single order. There is also a suggestion that MIDI files may only be licensed after the publisher has heard them. That means a library has to carry out the sequencing work with no guarantee of getting a licence on presenting it to a publisher.



Hits for Billy Joel – but missing from MIDI file libraries.

So why the sudden switch in rules? Is it just about money? The MCPS may say it's to do with rights but if there was no money attached would they be so interested? As one MIDI file company said: "If the music industry can get away with charging twice as much for a CD as a cassette when they cost less to produce, they can get away with anything."

But why make it so difficult for the MIDI file companies? One theory suggests that the publishers want the MIDI file market to themselves. Another is linked to publishers' paranoid attitude to print rights. Yet another suggests the music corporations want to control MIDI files just as they control cassettes and CDs.

Whatever the reason, and whatever the eventual outcome of the situation, two things seem clear: The cost of MIDI files will undoubtedly rise and the range of available MIDI files will fall drastically. Both ways, it's the customer who loses the small companies that suffer and the big boys who gain.



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History in sequence



Sequencer One from Gajits (now Software Technology) was one of the UK's ST sequencer offerings along with Trackman and Virtuoso

If over a computer earned its place in musical history it's the Atari ST Whoever's idea it was to build MIDI sockets into a computer (the most popular theory is that it was Jack Tramiel's son) undoubtedly helped the ST become the musician's favourite computer

The ST wasn't the first computer to support MIDI of course – the Commodore 64, the Apple II and even the Atari 130XE all had music software – but it was the first affordable machine and that encouraged music software developers to write for it

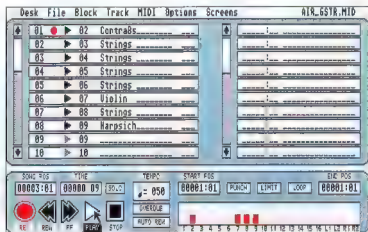
When the ST were a lad

When the ST was first launched over ten years ago, MIDI was in its infancy. There were only a handful of instruments with MIDI sockets (remember Sequential's Prophet 600 and Roland's Jupiter 6?) and programmers were just starting to explore the potential of controlling MIDI through software

The term "sequencer" was already well-established and referred to analogue devices that could play a short sequence of pre-programmed notes – à la Tangerine Dream. Although the modern sequencer is more of a music processor or recorder, the name stuck

One of the earliest sequencers was Steinberg's Twenty Four which cost £165 (a lotta lora money ten years

Ian Waugh looks back over ten years of sequencing history on the Atari.



ago!) and it was, at the time, the biz. It later became Pro 24 and can still be found in some music bundles today. Other sequencers on offer then included Miditrack by Hybrid Arts and MIDI Recorder by Dutch Company, Mopros.

Designer tracks

One of the major issues which concerned early music software developers was how to design the program and user interface so musicians could understand it and use it. Up until that point, the vast majority of musicians – and ordinary people too – had very little experience of computers so most programmers designed the sequencing concept around existing music technology – the multi-track tape recorder

Steinberg's Pro 24 is a classic example. It imitated a 24-track recorder, something few musicians could ever hope to own. It featured not only real-time input but step-time input too (an impossibility in the world of multi-track recording), quantisation (a totally new

concept), MIDI delays (another new idea) and many more facilities which could only be accomplished via MIDI

State-of-the-art though it was then, the user interface now appears very clumsy in comparison to modern programs. It was, however, a very influential design and had a profound effect on development for several years

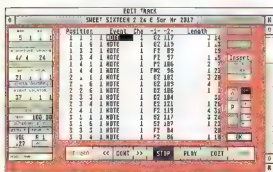
Take control

Most sequencers stayed with the multi-track concept offering 8, 16, 32, 64 and even an unlimited number of tracks. This was power most musicians previously only dreamed of although very few actually used more than 16 tracks, a fact that remains true today

Control over the music was via tape recorder style transport controls (this hasn't changed either) and there were punch in and out facilities which are really unnecessary in a MIDI sequencer

The potential of MIDI was just being discovered. If you made a mistake during recording you no longer had to

Who said the Atari market is dead – Sweet 16 rolled into play just a year or so ago!



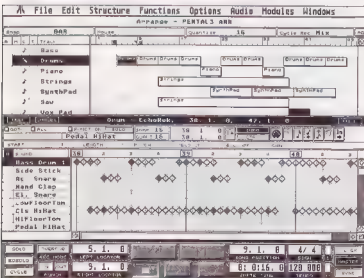
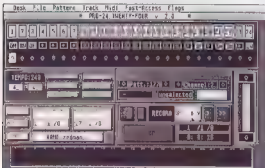
re-record the part. You could dive into the music data, find the offending notes and change them.

At first this was done through an event editor that listed every MIDI event in a track. Some early editors showed data in a raw numeric format but now they show information in a more friendly way. Pro 24 is still one of the most popular sequencer editors and ideal for fine tuning and editing data but for real ease of use something a bit more friendly is required.

Along came the piano roll or grid editor, based on the old mechanical player piano rolls. Notes were shown as oblong bars on a grid with a piano keyboard running down the side of the screen. It made it much easier to see notes in context and you could usually edit them via the mouse.

Other editors including a song editor which showed music in one-bar increments (still used in Passport programs although the company has withdrawn from the Atari market), graphic editors for handling controller data, drum editors to help create drum tracks and score editors.

The latter was very difficult to implement successfully. C-Lab added scoring facilities to the company's Creator sequencer turning it into Notator - one of the best sequencer/scorewriter programs on any computer.



Pattern maker

As sequencers developed, many new and exciting possibilities came to light. Many musicians felt comfortable with the multi-track linear-based system because it was familiar but MIDI data does not have to be stored in the same order in which it is recorded.

This led to the development of pattern-based sequencing in which musical phrases could be created in any order and moved arbitrarily around an Arrange page to create a song. It is now regarded as being the most powerful and flexible way of creating music.

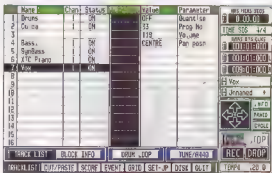
Steinberg's Cubase is generally acknowledged as being the first sequencer to use this system and the vast majority of other sequencers soon followed suit.

With the realisation that MIDI data can easily be manipulated by a computer, programmers began to include sophisticated processing functions which many musicians now consider part of the music creation process. Groove quantisation, harmonic transposition, velocity and dynamics adjustment, arpeggiation, MIDI mixing, and scaled controller data processing are there to help your creative process.

Here and now

Sequencer development during those early years was fast and furious and at

The grand-daddy of them all. Steinberg's Pro 24 adopted a "24-track sequencer on a computer" approach and established the ST as the music computer a mantle that it still holds. It's successor, Cubase (S.A.), is more flexible and feature-packed, and offers a superb scoring module in Score 2.



one time there were over 30 sequencer packages available for the ST. Some were entry level programs costing from £50-200 but many were vying for the pro end of the market. Programs such as Hybrid Arts SMPTTrack, Digital Muse's Virtuoso, Passport's MasterTracks Pro, Dr. T's KCS and Hollis Research's Trackman came in during the '80s - and many went during the early '90s.

Partly through having good products and partly through marketing clout, two companies have dominated the sequencer market since the late '80s - Steinberg and C-Lab (which later became EMagic).

The current programs produced by these two companies - Cubase and Logic - bear little resemblance to those early sequencers. The arranging facilities and data processing functions would have been mind-blowing to the musician of ten years ago. In fact, a common criticism of these high-end programs is that they have too many features and are too complex.

That's as may be, but you don't have to use all the advanced features at once. You can grow into them as your experience and needs increase.

Over the next few months we'll be exploring some of the more interesting and even arcane aspects of sequencing. For beginners, we'll look at sequencing basics and bring you a collection of hints and tips you will be able to try with most sequencers.

Music and history - it's still being made with the ST.

Two more for the history books. MIDI Studio Junior (top) was yet another sequencer that appeared on the cover of an ST mag (ST User in this case) while Rave, from the author of Virtuoso, never quite delivered its potential.

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GEMBench 4.02



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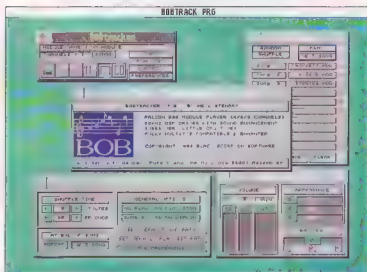
GEMBench 4.02 is the latest version of the industry-standard benchmarking program, programmed by our technical editor Ollie Ollie. With it, you can test the speed of your computer and compare it to those of other Atari based systems. There are benchmarks for every aspect of your computer you can name, from VDI text and graphics and GEM dialogue boxes to the optional floating point maths co-processor, floppy and hard disk access and more.

With GEMBench you are not tied down to comparing your computer with preset configurations in the program. You can create "User sets" which other users can compare their systems against, and this version comes with a selection of user sets created on accelerated STs, Falcons, TTs, Medusas and even under MacGEM! So if you want to know how much faster your system will go with a particular accelerator in it GEMBench will probably be able to tell you.

This version of GEMBench has an improved user interface and now comes with an on-line help system in ST-Guide format. It's well worth the registration fee.

About		System	
GEMBench GER Bench ver 4.2 © 1991, GEM, by Ollie Ollie All rights reserved. This program is distributed under the terms of the GNU General Public License. See the file COPYING for details. Author: Ollie Ollie		Falcon 01A 125 + 64 MEM 15.48 GEMDOS ver 4.0 Hard disk present Drivertx Enabled MMS 5.31 present System Ram 512K/1024K FPU not present Bus and Modbus Deferrable Delay	
ENVIRONMENT	TEST	TIME	UNIT
Integer Division	1000	0.000	ops/sec
Float Math	1000	0.000	ops/sec
Short Integer	1000	0.000	ops/sec
Long Integer	1000	0.000	ops/sec
String	1000	0.000	ops/sec
File I/O	1000	0.000	ops/sec
Sort Integer	1000	0.000	ops/sec
Sort String	1000	0.000	ops/sec
Sort Integer	1000	0.000	ops/sec
Sort String	1000	0.000	ops/sec
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Get up to speed
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BOBTracker is an advanced module (MOD) player that runs either as a stand-alone program or in accessory. It also makes full use of the Falcon's DSP chip to produce quality playback without burdening the main processor.

Most MOD players can handle 4 tracks of sequenced sound samples but BOBTracker supports up to 8 tracks with real, bass and treble control boosting.

When you run BOBTracker as an accessory (or an application under MultiTOS) samples can be played in the background while you get on with something else. All the primary functions are available from the main window which calls other windows as required. The video style buttons control playback as you'd expect and the eject button calls the file selector ready to load another MOD file.

A few non-essential features are reserved for registered users but at only £6 it's money well spent.

Duet 1.00

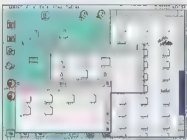


Goodman International • £1.95
• ST/STe/Falcon

Duet is a cheap, no hassles, networking program for TOS-based computers. You can connect your Atari via the MIDI port, serial ports and even the LAN ports (on the Falcon and TT) and even let both computers share the same printer.

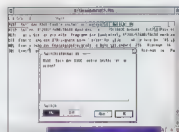
The program and documentation is in German but it is still very easy to set up. Duet comes with a set of drivers and all you need to do is choose the appropriate one for your setup. Then there is the configuration file and a program to read it. The configuration file specifies which drive icons on one machine relate to which physical drives on the other and what speed the network runs at. All three files go in the AUTO folder.

With this program, you can, for example, create a file on one computer and copy it to the other and vice versa. It is even possible to unpack a file across the network without any problems. If you've got two Atari's, and don't mind spending a few quid on cables, this is one you've got to try.



HS-Modem - for fast file transfers.

HS-Modem 6



Floppyshop
• £2.00
• ST/STe/Falcon

With the increasing interest in the

Information Superhighway and the growth of on-line services like Compuserve, many modem users are feeling the need for speed. While modems are undoubtedly getting faster, the ST's serial port is falling behind.

In fact, the ST can't make full use of the fastest modems without various fixes. One of them is HS-Modem, which not only fixes a serial port bug, but actually increases the speed with which data transfer occurs at the serial port. The increase in transmission speed is most prominent on the Falcon and TT, and not so much on the ST, which needs a hardware modification to the serial port.

HS-Modem is a modular system, where you only use the necessary bits. This version also comes with an easier way of configuring the program for your system although it's still nowhere near being perfect. Important bits in the documentation have also been translated into English. If you're sick of paying a large slice of your income to BT or Mercury, HS-Modem might just put a pound or two back in your pocket.

Get your Atari's together man!

OCR 1.3c



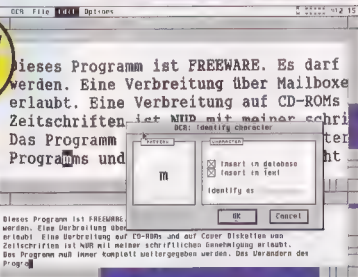
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• ST/STe/Falcon
 Optical Character

Recognition is no longer an

obscure application for techies. Hand scanner prices are as low as they'll ever be so if you want to get text into your computer, you've got a good chance with OCR. What's more it's freeware and doesn't cost you a penny.

OCR can be run on 0.5Mb machines, but I would recommend more memory, as scanned images tend to be large. The program comes with a couple of example images, which it whizzed through in no time when I tested the program and left me with some remarkably error-free ASCII files. I could actually edit and save.

**BUY!
ME!**

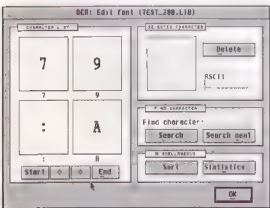


Scan text in and turn it into ASCII with OCR 1.3

Like its commercial counterparts on the Atari (notably Migrate OCR) and other platforms, OCR can be trained for any particular font. Training OCR makes it more accurate. Each time it comes across a character it can't recognise, you give it type in what it is, and OCR remembers it for the next time.

The latest version is now in English, and it comes with on-line help in ST Guide format. If you need to scan and interpret text or you just want to see what the technology can do, have a look at this.

Yep - you can even train the program to recognise characters for the next time...



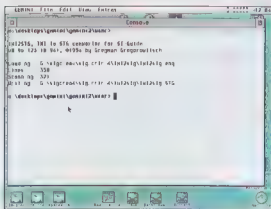
ST-Guide Creator 4



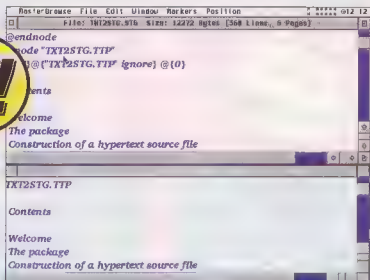
Goodman International • £1.95 • ST/Ste/Falcon

Many PD and shareware programs now come with on-line help in ST-Guide hypertext format. Many reference texts and classic books are also being converted to this format too and ST-Guide is rapidly becoming the Atari standard, much as Hypercard was on the original Apple Macs.

Why has it been so successful? Probably because it is so flexible and so easy to use. Indeed ST-Guide is something we



BUY ME!



Read all about it in ST-Guide.

should have had a long time ago – it lets you display text and images on screen with point and click links to other pages.

If you want to create these ST-Guide hypertext files for yourself, you can create them manually, by placing all the control codes in the correct places, in a text file, using a simple text editor. But this is tedious in the extreme.

ST-Guide Creator makes the process a doddle. Take a text file, import it into the ST-Guide Creator program, wait a few seconds, take the resulting file to the bundled Hypertext compiler, and sit back and admire the view.

A Hypertext compiler is bundled into the package.

Speedo Font Utilities



Goodman International • £1.95 • ST/Ste/Falcon

This is a disk that will certainly go down well with SpeedoGDS and NVDI 3 users.

It contains three separate programs, and a couple of rather good quality Speedo format fonts too. The first program, General GDS, lets you view and print installed fonts, printer control codes, and general information about your system. Next there is the GEM-Font viewer, which shows you the full character set of a particular GDS font.

The third program, SPD List, creates text files containing the actual names of the font, alongside the filename. This is very useful for looking for a particular font from the desktop, as Speedo fonts have pretty cryptic names. Not all of us can remember that the font file BX000648.SPD is in reality Bitstream Charter, for example! If you've a big collection of Speedo format fonts and want to back them up or create folders for particular types, this utility will be invaluable.



Manage your GDS fonts more easily.

Fast screen banking for your Falcon with TurboBlanker

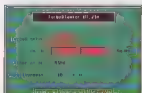
TurboBlanker 1.23e



Goodman International • £1.95 • Falcon only

Some Atari screen savers just blank the screen; others have plenty of colourful graphics but require a lot of memory and processing power. New screensavers always arouse interest especially if they're easy to set up and use little or no memory.

TurboBlanker is a Falcon-specific screen saver. It differs from many others in that system performance is accelerated when the screen is inactive. It also makes use of the energy saving mode in many modern SVGA and multisync monitors and works with screen enhancement utilities like ScreenBlaster and BlowUp. "Hot zones" provide precise control over what you want TurboBlanker to do. You can activate the screen saver immediately by moving the mouse pointer to the lower left hand corner of the screen, and it can monitor



input sources such as the mouse, keyboard and modem.

One possible problem. I tried TurboBlanker on two monitors – and it only worked on one of them.

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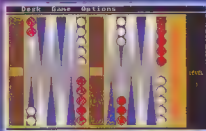
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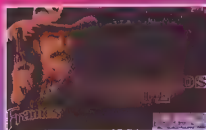
The Hobbit
A classic adventure game featuring Bilbo Baggins and his quest to defeat the dragon Smaug.



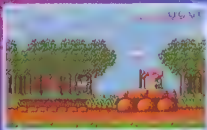
The Lord of the Rings
A classic adventure game featuring the quest to destroy the One Ring.



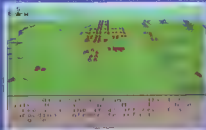
Backgammon
A classic board game featuring strategic gameplay.



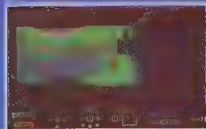
The Hobbit
A classic adventure game featuring Bilbo Baggins and his quest to defeat the dragon Smaug.



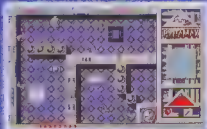
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PacShell



Floppyshop
• £2.00 •
ST/Ste/Falcon

Many archive formats like LZH, ARC, ARJ and ZOO have horribly convoluted command line interfaces that can be very confusing for first time users. Happily a number of shell programs have appeared to cushion beginners from the dreaded command line with comfortable point and click front ends.

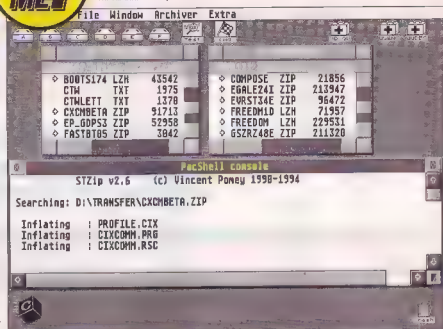
Archive shells are typically styled as twin file selectors like STZIP and Two-In-One but PacShell breaks with tradition and uses an alternative desktop complete with drive icons, trashcan and directory windows.

After initial configuration, archives can be extracted or created by dragging files between directory windows. Progress can be monitored using the console window which can be scrolled back should something unexpected happen. Archives can be dragged and dropped onto optional tool icons that can be installed directly onto the desktop. Common tools offer automatic virus checking and uudecoding and encoding.

PacShell offers hypertext on-line help in ST-Guide format which can also be used to view readme files in archives by double clicking on the desired file. Registered users receive a personal key to unlock a few non-essential features that are disabled in the shareware version.



PacShell provides
drag and drop
archive handling
via its own desktop.



Kaleido



Goodman International
• £1.95 • Falcon only

Colour icon editors are still a rare breed so any new offering is bound to attract attention. Kaleido runs in 256 colours in either 320x200 or 320x240 resolution which seems a bit strange as only 16 colour icons can be displayed and edited!



Kaleido was designed to edit the DESK-ICON.RSC file, the default TOS icon resource file, and though other RSC format files can be loaded they will probably display garbage. It has a good range of tools including useful polygon and line tools and this, combined with the ability to import graphics in TIFF and Windows BMP file formats, makes it easy to create stunning icons for your favourite programs.

Pressing the F1 or Help buttons activates the useful on-line help mode. In this mode the cursor changes into a question mark and can be used to point and click around the icons displaying brief help messages in the edit window. Kaleido isn't a bad effort but it certainly needs more flexibility.

Edit a kaleidoscope
of colours - well
sixteen of them
anyway!

PGPShell offers
"Pretty Good Privacy"
for everyone.

PGPShell



Floppyshop • £2.00 •
ST/Ste/Falcon

PGP, short for Pretty Good Privacy, is a public key encryption package designed to send secure messages and data files. PGP has been implemented across several platforms which, I suppose, makes it the de facto standard. The Atari incarnation is a TTP application that needs to be fed a series of command line parameters. Happily PGPShell makes the whole procedure easier, especially for on-line users, although it's also suitable for people who want to send disks by post.

Each PGP user needs two keys, one public and one secret which vary in size depending on the selected security level ranging from "Casual" to "Military".

To send a secure message you encrypt the file using the recipient's public key and optionally "sign" it using your own secret key. The recipient decrypts your message using his secret key, followed by your public key, if you signed your message. On top of this, your secret key is password protected which prevents anyone stealing and using your key.

Confused? Don't worry, it's all fairly painless - but unless you're a paranoid scientist it's hard to see why the average Atari World reader would use it.



Ruftrade



Floppyshop • £2.00
• ST/STe/Falcon

Ruftrade is a no frills German to English translator with one important advantage

over its peers - It generates readable English

Ruftrade evolved from the earlier E-Diot which asked the user to select the desired word from several alternatives. This resulted in larger, less efficient dictionaries and extremely slow translations

The secret of Ruftrade's success lies in its highly specialised Atari oriented lexicon which only contains a single translation for each German word. The most likely word in the Atari context has been determined by building the lexicon almost entirely from German Atari software documentation.

At only a fiver it's well worth getting hold of the registered version which includes an ever expanding dictionary with more 'group replacements'. These take common wrongly translated phrases and replace them with meaningful English equivalents which considerably improves the legibility of a Ruftrade translation.

My only gripe with Ruftrade is the interface which simply doesn't do the program justice



Voyager runs rings round Saturn!

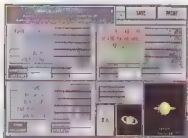
Voyager



Floppyshop • £2.00
• ST/STe/Falcon

If you're into astronomy you'll love

Voyager! I was soon totally engrossed in



exploring this fascinating package and marvelled at the sheer scope of the features on offer. Everything is accessed via the alternative desktop interface which features drop down

menus, icons, function keys and (by holding the right mouse button down) a pop-up menu which duplicates all the options in the drop down menus

It's a great shame that the shareware version is so crippled that it is little use at all. This kind of approach to shareware often alienates more users than it attracts but since the potential audience is probably fairly small the author deserves a registration fee from each and every user

The non-standard interface combined with the gaudy colours and lack of customisation are my only reservations about this otherwise excellent application.

Profile



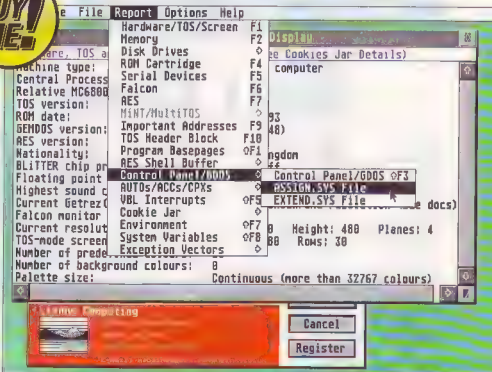
Floppyshop • £2.00 •
ST/STe/Falcon

Profile is one of

those utilities that looks set to become a standard Atari diagnostic tool. It performs a complete analysis of your system which can be saved to disk or printed out as desired. The information is divided into bite sized chunks and displayed a page at a time in the main window. The general pages offer a safe environment for nosing around your system and browsing through configuration files, auto folder programs, accessories, control panel extensions and so on

With four different machines each sporting different hardware components and TOS versions - and possibly running one of several multitasking operating systems, you're bound to run into the odd rogue program now and again, and Profile is designed to help developers figure out what's going on. I'm sure most developers would prefer to get a complete Profile report from a machine that refused to run their program instead of ten minutes of telephone abuse

Armed with nothing more than a copy of Profile you can turn yourself into a software developer's nightmare - now I'm off to tinker with my BCONMAP!



If you're curious about your Atari, why not let Profile take a look under the hood...

Hoog



Hoog sets new standards in terms of shareware platforms - take a gawp at those graphics!

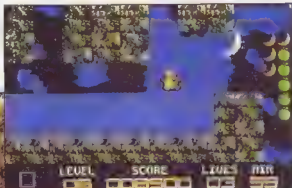


Goodman International • £1.95 • ST/Ste/Falcon (with Backward)

Game consoles such as the Super Nintendo and Megadrive owe their success to maniacally addictive, cutesy games and Hoog provides a taste of the genre's appeal on the ST. Put simply, this is one of the best shareware games ever.

Showers of stars are scattered as each piece of fruit is collected; pure class!

The star of the show is Hoog, a dumb-looking animal with a major mission on his hands. I'd spare you the gory details, but essentially you have to dash around a large, colourful room, rescuing children from cages.



Our man Hoog can stay under water but be sure to give him a breather every now and again.

worth its five registration fee several times over, even if the music does drive you insane. Judging by the sample levels, it won't take too long to complete, but I guarantee that you will have a bundle of fun along the way. A classic

fully colourful. Only the music lowers the overall tone with a bouncy melody that enters your subconscious and simply refuses to leave.

There are three sample levels in the shareware version of Hoog and the full game includes fifteen. These are spread over eleven different islands, each with individual graphics and unique challenges. Hoog is

Gnu Chess 3.5

Below: A mouse driven interface fronts up the all-new Gnu Chess - how about a 3D board game? Right: Hints and cheats are only a mouse click away, but you wouldn't use them, would you?

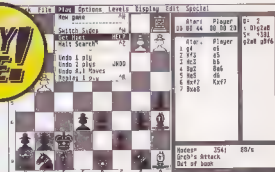
Floppyshop • £2.00 • ST/Ste/Falcon

There is something strangely addictive about computer chess games. No matter how hard you try, it's impossible to resist a quick game and Gnu Chess is likely to beat you hollow (speaking from experience).

It's not surprising really, as the rather lacklustre display disguises a pretty mean chess-playing machine. A huge library of opening moves lies at the machine's disposal,

and the documentation is proud to point out that the game has an ELO rating of 1500. There are no play levels as such, but you can specify the computer's thinking time and quick hints are available if you get stuck. Version 3.5 offers a much better interface than its predecessors, although you might

BUY! ME!



experience menu problems on anything but a 'clean' machine.

Gnu Chess has everything you could expect from a quality chess game. It's fast enough to be enjoyable and should provide enough of a challenge for most players. The mono-only graphics could be a bit more exciting, but you can always redesign the pieces.

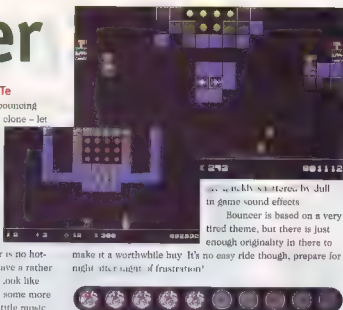


Bouncer

Goodman International • £1.95 • ST/Ste

It's Monday morning, it's PD Arena time, and bouncing over the horizon comes yet another Breakout clone – let's give it a hand! But before you turn the page in disgust, Bouncer is a little bit different because the bat has been replaced with a see-saw and two acrobats. The more successive bounces you can manage, the higher the guys will jump and the more blocks will disappear. Smart bombs make it a little easier to clear crowded areas, but it's tricky to use them while maintaining control of the platform.

As you can see from the screen-shots, Bouncer is no hot-shot in the graphics department – the blocks do have a rather appealing 3D quality but the acrobats themselves look like relics from the Spectrum and could really do with some more character. Favourable impressions created by the title music



Above: It's surprising just how difficult Breakout becomes without a standard bat.

Below: One man's sanity died to bring you this picture of the second level – yes, it's that difficult!

make it a worthwhile buy. It's no easy ride though, prepare for night after night of frustration!

Crazy Letters

Floppyshop • £3.00 • ST/Ste

Crazy Letters is a landmark game, being the very last Dunce's Cap production for the ST. It follows on from a whole line of semi-educational titles and is essentially a word game. The idea is to find a word hidden beneath a grid of score tiles, whilst keeping in credit points-wise. You can guess the remainder of the word at any time and a certain amount of strategy is involved – quitting a round while you are ahead for example. The second stage, entitled 'Vowel Play' is the standard issue pot-luck round and is followed by an



will not disappoint

opportunity to gamble your score for an extra life. Bonuses brighten things up moderately, but it's not really 'edge of your seat' material.

Crazy Letters is a typically DCS affair – it's lavishly decked out with sampled sounds and swish graphics, but you can't help feeling that the gameplay takes second place.

Nevertheless, if you have enjoyed Dave's work in the past, this one

Finish the words and win the points – it's as simple (and engrossing) as that.

Yukon

Floppyshop • £2.50 • Falcon

I must admit that playing patience wasn't exactly what I had in mind when I bought a Falcon, but it's surprising just how addictive the game can be, even when it's running on a machine capable of so much more. Yukon is a standard GEM card game, complete with window-based playing table, and a simple mouse-controlled interface. The game itself and the documentation are both in German, but it's no problem, as long as you are familiar with Patience (any half-decent book of card games will help you out with the rules). If the rather dull card-backs are a bit too much to stomach, you can always change them with the help of a supplied utility, once again in German. Although the game is shipped on a high-density disk, it does seem to run on the ST in high resolution.

Yukon is an ideal game to relieve the stresses of work. It will run happily in a multi-tasking environment, takes very

little memory and one click is all that's needed to ditch it as the boss hovers into view (usually seconds before a record high-score is achieved). A little more effort on the graphics side and we could have been looking at a classic.



Coloured cards, slick interface, GEM compatibility – yep, Yukon is a pretty good game by anybody's standards.

Back Issues...

... for your collection



Prior to Atari World, there were two other great Atari magazines, now sadly lost from the shelves. The much loved ST World sadly disappeared many years ago and is still sorely missed by many diehard Atari owners. The other, Atari ST Review, has now disappeared from the news stands in its original format.

Atari World has been fortunate enough to secure stocks of a limited number of back issues of ST Review and we are pleased to make them available to our readers. If your collection is incomplete, then why not order a copy from us?



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Most cover disks also include various utilities.



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Never mind the language



Watch and learn from Paprus, an excellent piece of software.

Jon Ellis offers some advice and thoughts on computer programming – no matter what language you use.

So you're a programmer? Or maybe you'd like to be a programmer? The chances are that you will identify yourself with a particular programming language such as C, BASIC or possibly assembler. In a way this is odd: the choice of language is only one aspect of the process of programming and not an overwhelmingly important one at that.

Let's take a step back from the issue of language, and focus on the ideas and design processes involved in programming. These can be separated into two broad areas: the creative, innovative process that generates the idea for a program or the look of a slick user interface, and the problem-solving that goes into implementing the concept.

The nice thing about computer programming is that the problem-solving part of the process is done within a defined, logical world. Programs don't fail for "no reason" – the cause may be obscure and difficult to pin down but there is always an explanation. By adopting an ordered and structured approach to programming you can produce neat, efficient and reliable code.

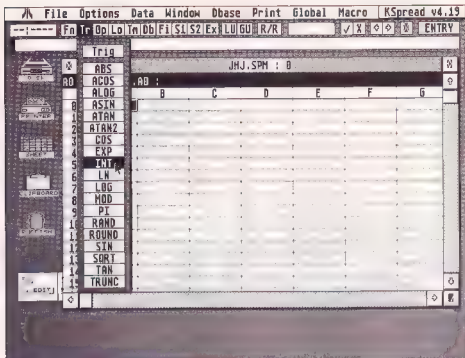
So much for the hand-waving – how can these ideas be applied to the practicalities of programming? Let's start by looking at the resources and backup needed for successful development.

Knowledge is the key

The key to programming a computer, whether it's your old Sinclair ZX80 or the university supercomputer, is knowledge. Without a good, solid background and a set of ground rules, you are blundering around in the dark. At the worst, programs will fail simply because they do not interact with the system in the correct way. At best, you waste time by re-inventing the wheel – in other words writing code that duplicates some service that the system already provides.

Decent information about the ST is possible to find. The Atari Compendium (HiSoft) and Atari's own DocSupport manuals provide comprehensive reference sources. Documentation supplied with compilers and language systems is also useful, though it tends to be restricted to the bare bones of the operating system services and often omits important details about the way the machine works.

You can also find juicy snippets of information if you have a modem. The Usenet newsgroups on the Internet such as comp.sys.atari.st.tech and the newly-formed comp.sys.atari.programmer are a good source of information. There is a lot of traffic with an informative message base and there are refreshingly few "my Atari is better than your Amiga" debates. It is also a good place to ask



questions about programming problems, as are the various *atari* conferences on CIX.

Last, but not least, reading source code for public domain programs can also be extremely useful. Why waste time binging your head against a problem that someone else has already solved?

It is important to read such material critically of course. Just because something is in print, it is not automatically right. There are plenty of errors and omissions in each of the individual sources described above, but with a

Spreadsheet macros are fine for simple arithmetic programs.

little experimentation and cross-referencing, you can usually arrive at the truth.

Saving some effort

It is always worth taking a lateral look at some of the problems you are trying to solve using your programming ability. For example, if a task is heavily number based, would it be quicker to write some macros for a spreadsheet like K-Spread 4, rather than programming a stand-alone application?

Similarly, many tasks requiring manipulation of text can be performed easily using tools like *awk* or *perl*. Their programming languages are pitched at a rather more abstract level than C or BASIC, allowing complex operations to be coded in a few lines of script.

To avoid stagnation and a blinkered approach to programming problems take a critical look at other people's software. One method that many will find useful is to examine a program and to ask yourself what it is that makes it particularly good or bad. You can then use your appraisal to guide your own program design in future.

Such an approach is particularly applicable to program interfaces. The quality of the user interface can dramatically influence the overall usefulness of a package. For example, *Papyrus* doesn't offer a huge increase in functionality over *Calligrapher* but it has a stunning and extremely powerful interface that has won it a lot of praise.

Having spotted a neat interface trick, a quick rummage through the program's RSC file with a resource editor can provide useful hints and inspiration for

Utility room

Over the years, many utilities have been written to make the task of software development easier. These range from large packages that automate many parts of program development, such as resource editors, down to simple utilities that print information about the structure of a file, or list the debugging information held in a program. Having a good suite of utilities close at hand can streamline the programming process, so that more time is spent creating new software and less on house-keeping tasks.

Many of the most powerful utilities originated in the world of multi-user computing, where graphics interfaces similar to GEM are only beginning to take hold. This means they tend to rely on a command line interface rather than the point and click we're used to on the Atari. Although this may seem daunting at first, it is well worth persevering, because once you've learned them, command lines are quick and easy to use.



Resource editors can be used to find out how GEM tricks work.



Disassembling utility programs can also be useful for learning about the system.

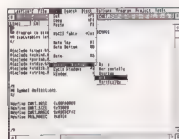


... and every programmer needs a toolkit of utilities!

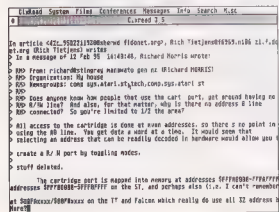
implementing something similar in your own programs.

Finally, despite all of the suggestions above, there is no real substitute for experience. Over time, as you write more software for *fi* system, you get a feel for the way the computer works, for the symptoms of common bugs and for the right way to approach a problem.

Next month, we'll have more practical advice for better programming and focus on the coding process itself.




Left: How did they do that trick with *memus*? Below: There's lots of useful info out there in cyberspace.



We're All Ears...

Launching a new monthly Atari magazine has taken some doing. Before we started this project, we canvassed for opinions – and this is what a number of real Atari owners like you told us...



"Although ST Review was the newest of the trumvirate, it was the best, with User coming second and Format coming fourth! If a new and effective magazine were to emerge I would be prepared to buy it."

TW, Lichfield, Staffs

"I only discovered the magazine [ST Review] some six months ago and immediately took out an infinite subscription... I now have to rely on the ST Format comic book to keep me informed on Atari specific news and developments. I said as much in a letter to ST Format and got the expected constructive response – a reference to there only being sheep in Mid-Wales anyway."

CEBP, Powys,
Mid Wales

"I do hope Vic Lennard can be persuaded to start a rival magazine to ST Format, which is a poor magazine in comparison to ST Review. I will support such a venture for sure."

CM, Bexhill on Sea,
East Sussex



"I regularly read ST Format from issue one onwards, and indeed before that in its guise of ST/Amiga Format... if you wish to see what an Atari magazine should not be you need look no further than the last issue. I certainly did not buy a copy and I do not intend buying in future if these pathetic "standards" are maintained."

I also read, enjoyed and benefited from every issue of ST Review. I am sure my views are shared by all his [Vic Lennard's] former readers."

RD, Harrow, Middlesex

"It sounds a nice idea [Atari World], as I am already missing ST Review. Thankfully my transferred sub to ST Format has now finished. I can't take any more of that crap that purports to be a serious magazine!"

MK, Handsworth, Sheffield

"It is a magazine like ST Review that keeps punters like me interested. We need the advertisements of companies like Compo, HiSoft and System Solutions to whet our appetite for new products."

DGG, Enfield, Middlesex

"ST Review was an excellent magazine, it is a great shame that when it was bought out by Future Publishing they didn't rename it ST Format and drop the old rag instead."

AD, Crawley, West Sussex

"If Vic Lennard can emulate the phoenix I shall certainly buy his magazine. The closure of ST Review was a disaster."

DGP, Stockport, Cheshire

"I would welcome its [ST Review] return with open arms."

NWS, Altrincham, Cheshire

All the opinions expressed on this page are direct quotes from Atari magazine readers taken from letters they have sent us. The views and opinions do not necessarily represent the views of Atari World or Specialist Magazines Ltd.

Alexa Robinson MURDER MYSTERY

The title graphic from a murder mystery on my Web site

Caught in the Web

Alexa Robinson explains why, in her house, the TV stays off and the computer stays on...

About a year ago, my husband presented me with an ultimatum – either I stopped telephoning the tons back home in the USA or I moved back there with them. He didn't say which he would have preferred but I got the message. Being an American I still can't get used to the different 'phone rates'.

Having been an enthusiastic Atari user since 1983, I had been reading all the Atari magazines. Two topics kept crop-

ping up again and again – comms and Internet. Email to the world, they said, so I figured I'd have a go. It had to cost less than the \$400 a quarter I was spending on 'phoning home'!

I joined CIX and found lots of fun conferences. But everybody was talking about the World Wide Web. I just had to find out what it was. After a while, I realised that I could access it through my CIX account even though I couldn't see it in all its glory as the browser software on the PC and Mac can

At the time I was connecting with my old favourite, a portable Stacy. Not in any way what you would think of as a powerful system. But it worked – even with my 2400 baud Zoom modem! I just needed the right software for ANSI emulation so I chose Compo's Stalker. With that, I was ready for the plunge

Hitting the g spot...

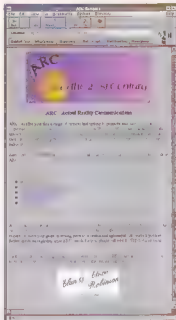
At first, I couldn't believe how easy it was! All I had to do was type GO

Alexa's Little Red Book

If you're on-line, try a few of these to start with... Type in addresses exactly as they appear...
 Yahoo! <http://www.yahoo.com>
 WWW Virtual Library <http://www.w3.org/WWW/VirtualLibrary/>
 E!Net Galaxy <http://www.e!net.net/>
 Yanooff's Connections <http://www.yanooff.com/connections.html>
 Planet Earth <http://earth.msc.mil/info.html>
 GNN Whole Internet Catalog <http://www.gnn.com/wic/>

Sometimes these URLs simply refuse to work. Don't immediately jump to the conclusion that you have done something wrong if you get an error message. Remember, this is like early days of television, except they don't have the nifty screen that say "We are experiencing technical difficulties"

First page of our service section (describes the different aspects and elements of WWW design.



Below right: Table of Contents from the ABC site

Below: First page of Letters From Abroad, a text based, interactive soap opera



IN INTERNET at the main prompt followed by WWW at the IP prompt that had appeared and the software did the rest I was there

But where exactly was I? And where were all those great things people had been talking about? It took me ages to discover that a URL (Uniform Resource Locator) is just like an address or a phone number. And it was a bit longer before I discovered that I could hit the key at any time and type in a new address to visit – without ploughing back through everything I had read already

The question of where to go is going to be a lot easier for you than it was for me a year or so ago. For me it was a hunt, hunt, hunt. Today there are magazines and books galore with detailed lists of addresses showing you how to visit all kinds of weird and wonderful places

Since those early days, I now connect to the Web with my new Falcon 1 still use Stalker but with a 14 400 modem. It's a lot more fun at the higher baud rate – I can visit a lot more places in a shorter period of time!

I have even built my own Web site, all with just 4 Mbs of RAM in my Falcon. A 350 Mb hard disk and some great Atari software I have to rely on my Mac and PC friends to check the layout of my work – and sometimes I have to come racing home to correct the coding if it doesn't look the way I planned it!

I had quite an experience when one of my features was listed in Yahoo, a popular Web directory, and I had well over a thousand visitors from all over the world browsing my pages on the first day. So when you're out on the Web don't forget. Come up and see me sometime!

The way of the Web

Atari has a problem. Multi-tasking hasn't been around very long but it is vital for World Wide Web access – you need a network program to handle communications with the Internet service provider and another preferably graphically based, program to sort out and display the information.

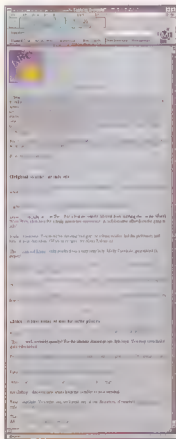
This lack of a real standard multi-tasking operating system has meant that no one has been able to offer a network layer. The difficulty of writing an add-in system of a Web browser with networking capabilities has been too hard a challenge for Atari programmers.

It is not lost though – quite the reverse is fact. The advent of MMT has led to the creation of MMT-Net (a networking layer), which is being re-worked for the up-and-coming Magic operating system. As a result, there are at least 3 Web browsers on test at the moment.

The two that are available are Lynx, a text based browser, and Chimera, a graphical port from UNIX. The bad news is that these two programs require the user to have a huge amount of technical knowledge. The latter even needs 8MB of memory!

The best hope seems to be a collaborative effort from Amiga Graphics and Chris Kidd. This project – code-named Route 66 – is aimed at the non-technic. It will run on any Atari with 2 Mbs or more of memory, feature a standard GEM interface and use vector fonts for display.

The availability date is uncertain but when it happens we'll have a browser to be proud of. In fact, Atari World may have had a small part to play. According to Chris, the promise of a new Atari magazine has "galvanised me into action". Now don't say we can't do anything for you...





With support on the Atari platform becoming harder to find, Harry Sideras looks at ways of providing your own...

Somebody, somewhere, is sitting in a study or back bedroom right now poring over a keyboard, illuminated by the glow of a monitor screen filled with an image that doesn't make sense. It might be a text file that can't be imported, an image that defies editing or a calculation that insists on the wrong result. Whatever it is, the solution defies their best efforts and there's no-one to turn to for help. The original supplier of the program might have gone out of business or the publisher turned toward other platforms.

This is the familiar and frustrating scenario that we've all each faced at one time or another and one which is likely to become more common in the Atari world as time goes by.

Thousands of users stay loyal to the Atari platform. It may be through economic necessity or a conscious preference to avoid the dubious attraction of expensive PCs and Macs, computers that demand enormous resources to persuade the processor to performing at anything like a reasonable speed.

So what can Atari diehards like you and I do? A few things spring to mind. We can upgrade the software in search of added features or switch to more powerful packages. We could also seek out separate, external utilities to do the job or even upgrade the hardware, if necessary.

Alternatively, we can take advantage of our greatest resource of all – the wealth of experience contained in the userbase that has bought a million Atari computers in the ST's ten year lifetime!

Getting connected

OK, it sounds good on paper but the likelihood of making contact with the tiniest fraction of this userbase is pretty remote, isn't it? Maybe, maybe not.

Fifteen years ago in the wilds of Norwich, Ken Ward faced this same dilemma and placed an advert seeking out others in the same position "Atari ST user seeks help. Please phone..." it read. From the reaction he got and the group he subsequently established it

was clear that he wasn't the only one in the same boat.

In time, his involvement and enthusiasm brought him to the attention of Atari itself, who invited him to organise the User Group section in the Atari Village stands at Olympia. From there he set up The Association of Atari User Groups, compiling a directory encompassing the whole country, enabling people to make contact with those who had the raw get-up-and-go to organise themselves into a group in their local area.

What's on offer

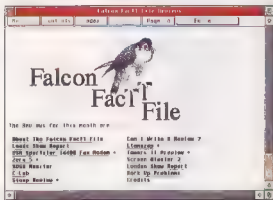
Whether it's small and informal or large and organised, any user group will provide a range of interests and experience, from games players with 520s to serious enthusiasts with all manner of memory and hardware upgrades. There will also be the opportunity to pick the brains of the techies and to pass on your own hard-earned tips plus the chance to see the latest program in action and to

show off your own expertise in your favourite software.

User groups don't have to be local either. Support can be found by contacting organisations that specialise in areas like MIDI, DTP or programming. Falcon and TT owners can get help and advice from a group dedicated to putting users in contact with each other and don't forget the Internet and the privately run BBSs with a vast amount of knowledge and software on offer.

All these areas will be covered in more detail in the coming months. The concept of User Groups comes into its own when other avenues of support decline. It's time we began to help ourselves.

Compiling a club disk of demos and reviews can provide a theme for monthly meetings and encourage feedback.



Where to go

If you're looking for the nearest user group to you, a list can be obtained from Mr Ken Ward, Association of Atari User Groups, 45, Coleburn Road, Norwich NR1 2NZ. Tel: (01603) 661149.

If you currently run a group and haven't asked to be included in the directory, contact Ken with your details. If you still find yourself without a user group in your area and you're interested in starting a group of your own, an information pack is available with advice from Mr Terence John, British Association of Computer Clubs, 148, Farzehill Road, Borehamwood, Hertfordshire WD6 2DX.

In addition, BACC can provide a listing of all clubs in your area, irrespective of platform, some of which may be interested in an Atari section to add to their membership and share costs. Why not give them a try?

If you have any feedback, I'd be glad to hear it. You can contact me here at the magazine or via email to sidclery@cis.compulink.co.uk.



Q & A

You send in the questions — Ofir Gal and his team of experts set about solving 'em...

All Packed Up



I own a second-hand 2Mb 57c, which I bought about 6 months ago. I am 63 years old, and this is the first time that I have even used a computer so I am very new to this technology.

When I bought the computer, it came with some games and a few utilities (as I recall the seller telling me). These utilities included things such as word processors and other software that I find quite useful. It took me more than two months to try out all the software I got with the machine. After this initial period, I decided to look for more

software, and thought that I would try some Public Domain libraries. I scanned the Atari magazines for adverts and, on finding a library that claimed to have the most files on a disk, I ordered some software.

I got this within a week but on trying to run the programs, I get spurious characters on the screen, and some 'dings' from the computer. I was pleased with the quick service, but am very annoyed at receiving software that does not work. What can I do?

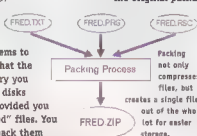
Alan Ion,
Durham

A It seems to me that the library you ordered the disks from has provided you with "packed" files. You need to unpack them before you can use the programs.

Most Public Domain libraries pack or compress the software so that more can be put onto a disk. As an example, let's say

that a program comes with three files: FRED.TXT, FRED.PRG and FRED.RSC. All together these might be, say 450Kb in size so using up more than half the capacity of a double-density disk. Packing these files with ST-Zip would compress these files and store the lot as one file, possibly called FRED.ZIP. The final packed file will, probably be as small as 200Kb in size – less than half the size of the original package.

There are different packing techniques, and you have to use a certain unpacker depending on the three-lettered file extension. The most common packed file extensions on the Atari platform are ARC, ZOO, LZH and ZIP.



Printer Trouble

Q After many years of service, I decided my Citizen 1200 printer needed to be replaced, mainly because I couldn't print landscape pages from Timeworks 2. Now I have a new Hewlett Packard 520 DeskJet, which is quite excellent, but I want to print closer to the edge of the page. I can get the printer to print within 5mm or so of the right, top and bottom margins, but the left margin is some 3cm in landscape mode. I have set the printer DIP switches to accept A4 paper and altered the perforation skip too. I have set the printer offset values in the "set column guides" dialogue box: everything is printed in the right position but work to the left of the page is still clipped. Most of my word processing is done on the move with my Amstrad NC 200, which ports its files straight into Timeworks and prints great with the HP 520.

I also use an old database program called Trimbase but I am having trouble using printer codes in the installation program – the decimal code that the HP520 needs is too long for the program's input parameters. Any ideas?

Finally, what is the difference between GDOS 1.1 and 1.8?

Chris Miles

A You have made a good choice of printer: the DeskJet series of machines are solidly made, and should give you years of service. Unlike some dot matrix printers, the DeskJet is incapable of printing on every part of a page. On portrait oriented-A4 paper, there

is an unprintable zone of about 6mm on the left and right margins, and about 12mm at the bottom of each page. This 12mm wide strip corresponds to an irreducible left margin for landscape prints.

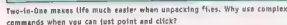
The Printer Drivers desk accessory with SpeedoGDOS gives you accurate control over printout areas.

A 3 cm left margin for landscape prints does seem excessive. With the printer turned off, set the DIP switches for A4 paper and disable perforation skip. Turn on, and try to print a landscape page with zero left margin. If the output is clipped to a 12 mm margin, the limit of the printer has been reached. If the margin is larger, the software is not configured

properly. In addition to checking the settings within Timeworks 2, you may be able to alter the printer driver itself. Under SpeedoGDOS, the DeskJet 500 driver can be configured to automatically take account of the unprintable zones. This feature can be disabled using the Printer Drivers accessory that comes with SpeedoGDOS.

The printer set-up routines in many older application programs, like Trimbase, were designed with the Epson-type printer control codes in mind. As a result they often cannot cope with the DeskJet's PCL (Printer Command Language) codes. As far as I am aware, Trimbase is no longer being developed, so a more DeskJet-friendly package is unlikely to emerge. One strategy that is sometimes useful in these cases is to write a small program to send the desired control codes to the printer. This can then be used to set the printer up correctly, before the application is run.

With regard to GDOS, this has been through a number of versions over the years, and many have been rather unreliable. The oldest stable version in general circulation announces itself as "Release 1.1" (not to be confused with "Version 1.1", which preceded it). "Version 1.8" also predates Release 1.1 and is not as stable. You might want to consider getting hold of NVDI – not only is it a faster and much more reliable replacement for GDOS, it also speeds up screen updates enormously. You will be surprised at the difference it makes to the feel of your machine! Jon Ellis



LHARC and STZIp come with their own easy-to-use interfaces. Arc and Zoo use archaic commands to unpack software, and are certainly awkward to use. For this reason, I suggest that you use Two-in-One. This program provides an easy-to-use interface for Arc and Zoo, and also supports LHARC, and STZIp. Two-in-One is a shareware program (also known as "try before you buy"), and is supported in the UK by our very own Joe Connor. The latest version is 1.22. Nemesh Rhabuta

WP word processing

Q For the past few years I've been using

1st Word Plus to write reports for my business and personal letters. It's a small business, just myself and my wife, but although we find our Atari superbly suited to our needs we are becoming less satisfied with 1st Word Plus. These days even a small business requires good quality printed output, with well designed letter-heads and a range of different typefaces. I know that there are better word processors available for the Atari but some of the terminology

Papyrus Gold — possibly the best program on the Atari even

A bitmap is a method of storing graphics (for instance, a character in a font) where each dot (pixel) is defined as being either on or off. A vector graphic is held as a number of point co-ordinates – for example, a triangle would be held as three

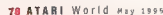
The best two word processors on the Atari are That's Write 3, sold by COMPO, and Papyrus Gold, sold by HiSoft. The former is a more than adequate word processor with very good support for any printer's internal fonts. It uses SpeedoDOS technology internally - you don't

Which you choose is up to you, but most writers at Atari World seem to prefer Papyrus. Best of luck with your purchase - write back and tell us how you get on. Graeme Rutt

Q All of these questions apply to

The 40MB of hard drive space is filling rapidly, and Atari is not very helpful (or forthcoming) in whether and if so which, larger hard drive may be fitted. Can you help? Also on the subject of hardware, can a Blitter chip be fitted, and (showing my status as a computer neophyte) can anything be fitted to improve its general speed?

And now to software. Firstly, are packers/disk-doublers usable on the Stacy, and if so would they slow



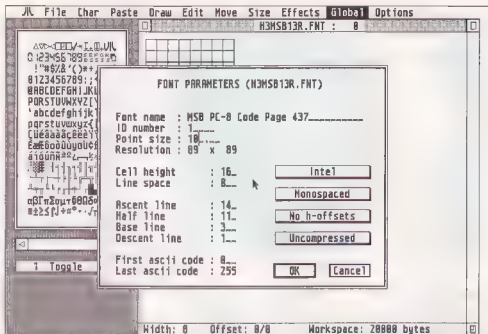
things down too noticeably? And secondly to a problem that probably has a very simple answer. I have several accessories on my "C" drive, which also contains and runs NeoDesk 3. These are: BIG_BEN.ACC, GOODIES.ACC, HDUTIL.ACC, KEYSLOT.ACC, MAPPER.ACC, NVDI.CONF.ACC and TEMPORAL.ACC, of which GOODIES, HDUTIL, MAPPER and TEMPORAL have related PSC files. In the NeoDesk pull-down menu, clicking on "Next Slot" produces no reaction at all, while clicking on "Big Ben", "Beats as mSecs..." and "Tempo Mapper" brings up a window with, "No MROS in memory" in it.

This is where I get really confused, because there is a folder called MROS which contains various files. Are these accessories usable, or should I take up knitting instead?

Adrian V. Thackray

A The Stacy is a great tool for MIDI work, but it is slow in comparison with the Falcon and TI. The internal hard disk is of the SCSI type and is one designed for laptop computers, measuring just 2.5" in diameter. You can replace it with a larger capacity one, as long as it is a SCSI drive. Using a disk doubler like Datalite works on the Stacy, but it will certainly slow down disk access.

As far as speed is concerned, you should get NVDI if you don't already have it, since it will most definitely accelerate the display of graphics and text



In FontKit, make sure the Font Parameters are set correctly otherwise NVDI won't load your fonts.

on screen more effectively than a Blitter chip. Fitting a hardware accelerator board is not simple, but you may like to speak to System Solutions - they may be able to help.

It seems that the previous owner of your system left some desk accessories that are of absolutely no use to you! Big Ben, Key Slot, Tempo Calculator and Mapper are all Cubase utilities and will not work without Cubase; NVDI Configuration is of no use unless you have NVDI installed. All these are just

taking up valuable hard disk space, so you delete them. The MROS folder is only needed if you use Cubase - that can go as well. Off! Gal

Fancy Font



Q I have bought HVDI but I don't like the default Monaco font. How do I change it?

Paul Ross, Glasgow

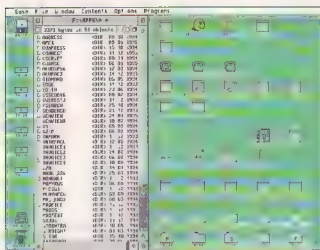
A There are two solutions. The simple one is to delete the files called MONACO.FNT from the GEMSYS

folder on your boot disk. This will revert you back to the Atari font. Alternatively, you could install an alternative font.

First of all, you need to obtain some GDOS bitmapped screen fonts from a PD library. They normally have the file name extender "FNT" and may start with the characters "H3" or "H2". You could also design your own using a font editor such as FontKit. It is usually easier to start with another GDOS font as the basis or a FontKit screen font.

If you're not using a GDOS font, then you'll need FontKit to convert it. Choose the





Ease – a very fine replacement desktop, icons a go-go and more features than you can think of!

"Global/Convert" font menu item, select "Gemfont", then "High-res" and "90x90" to get the Font Parameters dialogue box. If you already have some suitable GDOS fonts then load them into Fontkit and go to this directly. Here you need to give the font a suitable name, then an original ID number. You can't have a number used by any of your other GDOS bitmapped fonts. A value of 1 is usually OK.

Next, you need to change the point size. For the 8x16 font, the point size must be 10, for the 8x8 font the point size is 9 and the 6x6 font has a point size of 8. Select Intel format, and make sure that the font is not compressed and is set to Monospaced not proportional. All these are most important. Save the font. Fontkit will give

the new font a name such as "H3MSB13R.FNT". The convention here is that the numbers refer to the point size. Change the "13" to "10" and in the other two fonts, the "06" to "09" and "05" to "08". Place these fonts in the folder where your NVDI bitmapped fonts lie, as stated in the PATH line in the ASSIGN.SYS file.

Load the ASSIGN.SYS file into an editor. Change all the lines starting with an "s" containing the MONACO font details to match the name of your new fonts, such as:

```
PATH = D:\GEMSYS\NVDI
O1p SCREEN.SYS
s H3MSB08R.FNT
; 6x6 system font 8 points
s H3MSB09R.FNT
; 8x8 system font 9 points
s H3MSB10R.FNT
; 8x16 system font 10 points
```

You don't usually need the 20-point size font and the "s" is most important: it tells NVDI which fonts are your system fonts. Now reboot. Mark Balnes

Desktop Icons



I've seen pictures in Atari magazines that show program icons on the desktop. I've tried to do this on my system (Atan TFM2, 2MB memory, TOS 1.02) and it doesn't work. Can you tell me how to do it? M. Fotherington, Sussex

A The problem is your version of TOS. To get icons on the desktop you

require TOS 2.06. As well as desktop icons, this version of TOS has improved disk-handling, a more functional file selector, keyboard short-cuts and lots of other functions not to be found on TOS 1.02. Get in touch with Systems Solutions or Compo for a TOS upgrade.

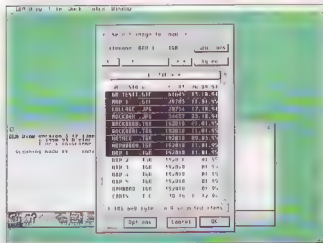
Alternatively, you might like to think about using a replacement desktop such as Gemini, TeraDesk, NeoDesk or Ease. These are programs that you install on your boot disk (a hard disk is best) and provide you with all the desktop functions you're ever likely to need. They are generally better than TOS 2.06 and will improve your desktop considerably. Gemini and TeraDesk are public domain products that you'll find in most PD libraries; NeoDesk is sold by Compo; and Ease by Systems Solutions. Graeme Rutt

Image Conversion



Q I run a small DTP business from my home and use the excellent GENVIEW to convert clipart images from a variety of sources into the GEM image files that Colamus 1.09n

By using the Selectric replacement file selector with GENVIEW, you can select more than one file for automatically loading.



expects. While the Global Convert option is very handy, and can convert a whole folder of graphics very quickly, I sometimes need to view the graphics first to check which I want to convert. I find it very laborious to load in each file separately and wondered if there was a way to load images automatically?

Sean Green, Middlesex

A There are various ways in which you can load a number of images at a time into GENVIEW. The first is to use the Selectric file selector which is shareware and available from PD libraries. It enables you to select multiple files which are then loaded at once by GENVIEW.

Another solution is to use a replacement desktop, such as Ease, which enables you to drag and drop as many files as you want onto the GENVIEW icon. GENVIEW will then load and display those files.

Under GEM there is a limit of how many windows may be open at one time. If this is a problem then you might like to consider a freeware add-on called WinX that can up your window count to 40. Graeme Rutt

Send Us Your Questions

Can't find anyone to answer that nagging question? Then drop us a line. Our team of experts are on hand to investigate and solve almost anything you can throw at them. Just send your letters to

Atari World Q&A,
Specialist Magazines Ltd,
Unit 3 Green Farm,
Abbots Ripon,
Huntingdon,
Cambridge PE17 2PF

or email them to
esq1@compulink.co.uk

While every effort will be made to answer your question within the pages of either Atari World or Atari Plus please note that individual correspondence cannot be entered into.

Fancy Earning A Tenner?

All you have to do is send us a useful tip for your favourite program – what could be easier!

Send us your hint on a disk, saved as a text file (preferably), along with a screenshot for illustration, or possibly a drawing if it's a "you can build this" style tip. We'll pay £10 for every reader hint that we publish.

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Brandt Fernandez Europe 3, 16, 34, 35 Atari World The Desktop Centre, 17-19 Blackwater Street, East Dulwich, SE22 8RS Tel: 0181 693 1919	HiSoft IBC, OBC Atari World The Old School, Greenfield, MK45 5DE. Tel: 01525 718181	ST Club 59 Atari World 7 Musters Road, Nottingham, NG2 7PP. Tel: 0115 945 5250
Caspian Software Ltd 42 Atari World Block 1a, Lee Valley Techno Park, Ashley Road, Camden, N17 9LN. Tel: 0181 880 4450	Impact Software 9 Atari World 12 Bell Lane, Swansham, NN13 5HP. Tel: 01280 850450	The Upgrade Shop 12, 13 Atari World 37 Crossall Street, Macclesfield, SK11 6QF. Tel: 01625 503448
Compo Software Ltd 45, 50, 51, 64 Atari World 6-8, OBC ST Source Unit 3 Green Farm, Abbots Ripton, PE17 2PF. Tel: 01487 773582	JG Design Services 65 Atari World 76 Gartcows Road, Falkirk, FK1 5EQ. Tel: 01324 638815	Titan Designs IBC Atari Pro 6 Witherford Way, Selly Oak, Birmingham, B29 4AX. Tel: 0121 693 6669
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Digital Awareness 56 Atari World Eurotech House, 31-5 High Road, Chadwell Heath, RM6 6QW Tel: 0181 598 8081	LAPD 60 Atari World P.O. Box 2, Heanor, DE75 7YP. Tel: 01773 761944	Goodman Int. OBC, ST Source 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent, ST3 1SW. Tel: 01782 335650 Magnetic Fields Unit 2, Shelley Road, Ashton, Preston, PR2 2DB. Tel: 01772 881190

TalkBack

Each month, Vic Lennard puts an industry figure on the hot spot with four searching questions. To start the ball rolling, Neal O'nions, publisher of Atari World, is grilled...



Neal O'nions, publisher of Atari World.

The first question is the obvious one – what on earth possessed you to launch a new Atari title?

"I'm a great believer in the longevity of the Atari market. History tells us that computer platforms don't die overnight. Take the Sinclair QL – only recently I sold an Atari TT to a customer, with loads of memory and a little hard disk simply to run a QL emulator.

"When I found out that ST Review was going to close (a bit before most people) I did actually get involved in a possible buy-out. However when someone else put more money on the table I decided it was better to launch a new magazine. At the time I was a bit disappointed, but in retrospect it is the best thing that could have happened. While issue one of Atari World may not be perfect, starting with a clean sheet has enabled myself and my team to produce something much more relevant to today's Atari user. I hope we have achieved our goal of taking the ST Review concept and making it better – the survey results will show."

You seem to wear a lot of hats. You run COMPO, organise Atari shows and also fulfilled the ST Review offers with Go Direct. Can you cope with another?

"This topic vexed me greatly when I started to plan Atari World. How would people react to a dealer who also owned a magazine? The most stunning thing has been the phenomenal support I have received from everyone since first starting to get this project off the ground. Even though I was warned that there were not enough advertisers left in the market, we've proved the doubters wrong. Issue 1 sold out, we've already sold out issue 2 and we are now selling issue 3."

"My commitment to you when you decided to edit this magazine was that editorial was your job not mine. I think you are a strong enough character to ensure that is the case!"

We have seen ST Action, ST User and ST Review close, and ST Applications cut back. Why do you think you can buck the trend?

"I think that other publishers have missed the dramatic change in the profile of a typical Atari computer user. I suppose that because I talk to active users every day I'm a bit closer to what they are really like and what they want. The days of the joystick-slamming 14-year-old are long gone. Today we have an audience dominated by professional people, be they using their ST to make a living such as in music or DTP, or be they home users where the ST is used for productive tasks, leisure and pleasure. Atari World is written with these people firmly in mind."

By choosing to bin the cover disk idea, aren't you flying in the face of conventional wisdom again?

"Readers get to choose. Yes there is a disk you can buy from us every month, either by phone, letter or with a subscription. However the number of complaints about the price of Atari magazines swayed my thinking. Our bread and butter audience are hobbyist users, and a disk for a magazine is too dear. New users are coming into the market all the time, many by buying second-hand computers are they really going to fork out £4 every month? I don't think so. The only way to keep Atari World below £3 per issue is without a cover disk, and that is what we plan to do. However, if the survey tells us differently..."

ATARI World

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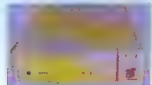
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NUTS TO YOU ALL!

As you will see from this page, we are still nuts about the Atari range of computers and are continuing to support the platform. We have released over 50 titles for the Atari over the last 9 years (most of them are to be found on this page somewhere) and now we announce **Squirrel Storage Systems**™ SCSI peripherals at realistic prices. We think that it's about time that Atarifolk were able to buy quality SCSI devices at competitive prices, so we have put together some very special deals based on high quality components all with 2 year warranty (Atari ST/STE owners will need a SCSI interface). Whether you're buying SCSI for the first time, extending your SCSI chain or fitting more units in a tower case, why not take advantage of the generosity of our storage-hungry squirrel and grab his nuts while you can.

SCSI CD-ROM Drives



SuperDouble - int £129, ext £189
SuperTriple - int £189, ext £249

Not all CD-ROM drives are the same. Our SuperDouble and SuperTriple drives are fast, modern devices supporting all the SCSI features that you need, based on quality units from the world's leading manufacturers of CD-ROM: Sony & Toshiba.

Both drives are housed in extremely stylish enclosures with all SCSI connectors and offer fast access times, stereo headphone sockets with volume control, phone line output, PhotoCD™ multi-session support, CD-DA compatibility with the convenience of tray-loaded action. The SuperDouble™ CD-ROM drive offers 360Kb/sec transfer while the SuperTriple™ attains 510Kb/sec, both far faster than any competitive drive for the Atari computers. You will need suitable CD-ROM driver software; please add £29.95 if you require us to supply this.

SyQuest Drives



44Mb - int £129, ext £189
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270Mb - int £419, ext £479

Introducing removable SCSI drives for your Atari computer. Based on reliable, proven SyQuest™ mechanisms, these 44Mb, 88Mb and 270Mb units offer transportable, compact, high performance and, above all, expandable storage for all your computing needs. SyQuest is the world leader in this technology across computer platforms which means that you can transfer work between Atari, Macintosh™ and PC, with ease. Our drive prices include 1 free cartridge.

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270Mb £169, **540Mb** £239
730Mb £279, **1Gb** £479
Add £60 for external units

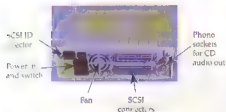
Hard drives are becoming more and more affordable and we can now offer some tremendous prices on a range of superb quality drives in a range of capacities.

These drives offer fast seek times (14ms @ 270Mb, 11ms @ 540/730Mb, 9ms @ 1Gb), large caches and high speed data transfer rates. All units can be supplied for you, to fit in your own case or pre-installed in one of our professional Squirrel Storage Cases.

We can supply all leads, terminators etc. Please feel free to discuss your exact requirements with our friendly technical staff.



Squirrel Storage Systems



All our Squirrel Storage Systems come either bare (int - ready for install) or internally with a suitably-equipped Atari or other computer or fully-cased (ext) with integral power supply, SCSI ID selector and audio out (for CD-ROM). The cases we supply are high quality, shielded snap-together enclosures, each with 40W power supply - the back panel of the 5.25" case is shown above. These SCSI enclosures are available at **£69.95** each (please specify 3.5" or 5.25" when ordering).

Please note that unless you already have one you will need a SCSI interface on your Atari ST/STE in order to attach our Squirrel Storage Systems. We recommend the ICD Link which we can supply at **£69.95** inclusive.

Programming

Our first program on the Atari platform was our HSoft Devpac assembler and we have always regarded the Atari 680x0 computers as ideal machines on which to develop your programming skills. Over the years we have produced a wide range of programming languages and associated utilities and now here is a great opportunity to purchase anything that you may have missed or perhaps have not been able to afford.

HISoft Devpac 3.10*	£59.95
DevpacDSP Falcon*	£49.95
HISoft BASIC 2.10*	£79.95
HISoft BASIC 2.02*	£59.95
HISoft C Interpreter	£19.95
Lattice C 5.6*	£99.95
Personal Pascal	£29.95
WERCS	£9.95
FIRST BASIC with	
Your FIRST BASIC book	£19.95
Modern Atari System	
Software book	£15
The Atari Compendium book	£39.95

Productivity

Two power programs and one three-in-one program here to satisfy a your word processing, database and spreadsheet needs.

Papyrus Gold*	£129
Twist 2 database*	£59.95
Atari Works*	£59.95
Papyrus Gold, Twist 2 and NVDI 3 bundle	£199

Music/Video

Two years ago we acquired all the M-Produce titles and, since then we have improved and developed these products, enhancing for the Falcon and re-working the documentation. These are all quality hardware products at superb prices.

Clarity Falcon* - 16 bit stereo sampler	£79.95
Replay 16 - 16 bit mono sampler	£99.95
VideoMaster Falcon RGB*	£59.95
VideoMaster ST RGB	£89.95
ColourMaster - RGB splitter	£49.95
StereoMaster ST - 8 bit stereo sampler	£29.95
PlayBack ST - 8 bit stereo playback	£24.95

* Falcon enhanced title. Some programs need extra memory and a hard disk to function, please check first if you are in doubt. All offers subject to availability and strictly only valid to readers of this magazine and until 30 May 1995. E&OE © HISoft 1995.

Essential Utilities

These are programs that you should never be without.

Diamond Back 3* - hard disk backup	£39.95
Diamond Edge* - hard disk maintenance	£39.95
XBOOT 3 - boot management	£29.95

Graphics

We offer two superb True Colour packages for painting and image processing.

TruePaint*	£19.95
TrueImage*	£39.95
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Ordering Information

All HISoft products should be available through your favourite Atari dealer but if you have difficulty in obtaining any title, we offer some special direct to you prices as listed on this page. To order directly from HISoft - just call us free on 0500 223660, armed with your credit or debit card - we will normally despatch within 4 working days for a postage charge of £4 or, for £6 by guaranteed next day delivery (for goods in stock). Alternatively, you can send us a cheque or postal order, please add postage as appropriate. All prices include UK VAT. Export orders - call or fax to confirm pricing and postage costs.

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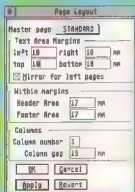
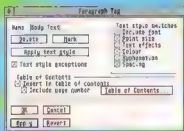
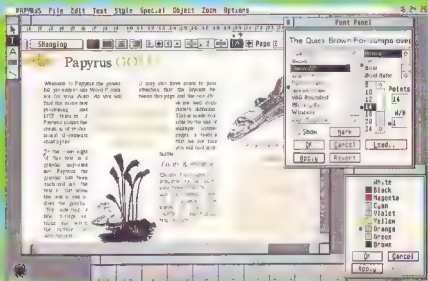
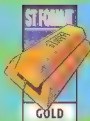
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ATARI *Pro*

Issue 4 July 1989

Sound **n** Vision

**Falcon
Special**

Find out what the Falcon
is really capable of...

Inside

- 2** See View - what can the Falcon deliver to us?
- 4** Musical Cheers - hard disk recording round-up
- 6** High Flyer - C-Lab's new Falcon Mk II
- 8** Colour Me Bad - graphics and DTP in true colour
- 10** Power Play - how the MSP delivers its stuff
- 13** Answers - the Q&A doing your questions

EXCLUSIVE!

**C-Lab unleashes
the
Falcon
music
workstation**





Airborne again...

Atari computers appear to have nine lives. Just when you lose all hope, something else happens to revive interest in our favourite system. The latest news is that C-Lab, the German company behind the successful MIDI sequencers Creator and Notator, has announced plans to manufacture the Falcon Mk II. The new machine is specifically designed for the professional musician with improved audio and a built-in SCSI hard drive.

This is great news for all Atari enthusiasts because it promises further sales of the Falcon, encouraging ongoing development of programs like Apex Media and Cubase Audio. The additional sales may even revitalise the general Atari market. Digital Awareness, the UK distributor for C-Lab products has expressed interest in all aspects of Atari computing, from word processing to Internet access and beyond.

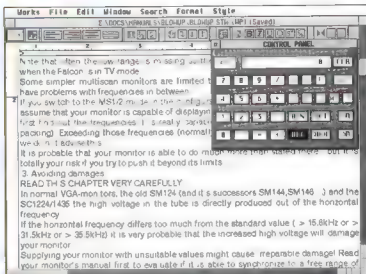
The real problem lies, in my opinion, with TOS. The operating system has not seen development for a while now and is quickly falling behind the likes of Windows and System 7.5. Apart from the obvious need for hardware development, a serious attempt must be made to bring TOS up to date. A possible solution might be to include Magic with every new Falcon. Magic has already proved itself as an ideal multi-tasking system for Atari computers. If C-Lab takes the plunge and appreciates that there is more to the Falcon than MIDI, the future for Atari computing will be bright.

OFIR GAL, technical editor

Flaunting



Ofir Gal unravels the truth about the Falcon's many display modes.



The standard VGA mode consists of a 640*480 pixels. Normally VGA means a 16 colour display as shown here.

If there's one aspect of the Falcon that has confused even the most hardened Atari veterans, it has to be the video display. Many new users - this one included - have been confused by the ambiguous description of the video hardware in the manual. Indeed some three years after the Falcon's first appearance, there is still no complete explanation of which resolutions are possible with the various monitor types.

The Falcon features a fully programmable graphics board, but its capabilities are well hidden from the casual user. In fact, without additional software, the choice of screen resolutions is rather limited and dependent on the connected monitor.

In principle, the Falcon can generate all ST resolutions for compatibility. These are ST High (640*400 monochrome), ST Medium (640*200*16 colours) and ST Low (320*200*16 colours). In addition, there are VGA compatible modes. VGA resolutions are all 640*480 pixels, ranging from monochrome to true colour. However, how

well these resolutions are displayed and which ones are actually available depends on which monitor you have connected to your Falcon.

You can use almost any monitor type, but only flexible multi-scan

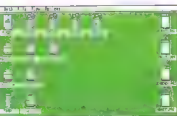
"Only flexible multi-scan monitors can produce the entire range of Falcon resolutions."

monitors can produce the entire range of Falcon resolutions. The basic choice is between the VGA and RGB varieties. You can also connect

a standard SM124 or compatible monochrome monitor and even a TV set.

Atari monitors

Colour RGB monitors are already in use for producing medium and low res on standard STs. They are mainly used for games that run at low resolution. A TV



ST Medium res was created to allow users of colour monitors to use word processors and other applications.

the Falcon

set can be used instead of an RGB monitor, although the image is not as clear.

On a Falcon, an RGB monitor like the Atari SC1224 can display low and medium resolutions. By using a technique called interlacing, resolutions up to 640x400 are possible, ranging from monochrome to true colour.

Interlaced display is fine for viewing photographic images, but is almost unusable for text or drawing due to screen flicker.

The resolution can be stretched even further by using overscanning. This method uses the black border area

around the display and therefore extends the resolution to 768x480. The overscan mode is not available from the desktop, but can be enabled by using a small Auto folder program.

RGB colour monitors are therefore best suited for games and image viewing using the high resolution true colour display despite it being interlaced. Apart from the Atari models, several manufacturers like Philips (with the popular 8833) and Commodore have also produced good quality RGB monitors.

The trusty SM124 or a compatible monochrome monitor (like the older SM125 or the newer SM144) can also be connected to the Falcon. Not surprisingly, only one resolution is possible with this monitor - ST High at 640x400 monochrome.

VGA and beyond

For most purposes, a good quality VGA monitor is ideal for use with a Falcon. All VGA monitors can produce the three ST compatible resolutions, but go much further than that.

VGA is a loose term that normally describes a screen resolution of 640x480. When connected to a Falcon, a VGA monitor will display this resolution using 2, 4, 16 and 256 colours. Because of the limitation of the Falcon graphics board, only 320x480 and 320x240 are possible in true colour mode, the first of which is pretty useless. Apart from this and the lack of overscan facilities, a VGA type monitor will let you get a lot out of the Falcon video hardware.

Most VGA monitors these days are in fact Super VGA (SVGA) compatible. This means that they can happily display a screen resolution of 800x600 in addition to the standard VGA modes. The Falcon is capable of generating these screen modes but not without the help of additional software or hardware.

Resolution expanders

The Falcon video hardware can be programmed to generate a range of resolutions

cope with the resulting video signal. Using freeware programs like FalconScreen or commercial products like ScreenBlaster and BlowUp300, screen resolutions of 800x600 are accessed easily. With luck and a very good monitor, 1280 by 960 should be possible.

If you intend to use a resolution expander you should consider buying a multiscan SVGA monitor. This will prevent later disappointment when you realise that your monitor cannot produce the extended resolutions. It is not enough to look at the resolutions quoted in the adverts. The most important factor is known as the Horizontal Scan Frequency. A monitor should have a continuous horizontal frequency range of 30 to 60kHz to be able to cope with all extended resolutions.



True colour mode on a VGA monitor does not stretch beyond 320x240 which is only useful for games. Using a resolution expander, 500x400 or even more is possible depending on the monitor.



ST High resolution is a monochrome display with 640x400 picture elements (pixels).

About screen frequencies...

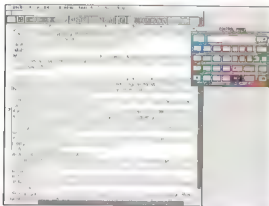
The number of times the screen display is refreshed each second is referred to as Vertical Scan Frequency. The SM124 was known for its stable and clear display which can be attributed in part to its high refresh rate of 70Hz. This means that the image is updated 70 times a second.

Lower refresh rates produce noticeable flicker with 60Hz considered the absolute minimum for serious use. RGB monitors normally refresh at 50Hz. When using a VGA monitor without any additional software on a Falcon the screen is refreshed at 60Hz. Using a software or a hardware screen expander this rate can be pushed to 70Hz and beyond to give a flicker-free display. Note that VGA and SVGA monitors have different



You can run in ST compatible modes, if old programs refuse to work otherwise.

Resolutions like 880x656 via a screen expander are useful for DTP work.



Maximum resolutions with each monitor type

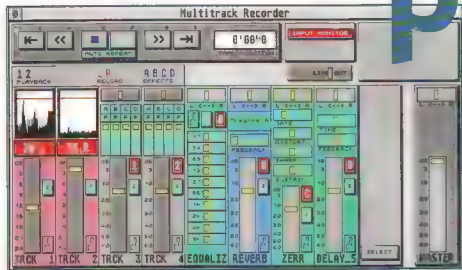
	2 colours	4 colours	16 colours	256 colours	True colour
VGA	640x480	640x480	640x480	640x480	320x240-480
RGB	640x200	640x200	640x200	640x200	640x200
SM124	640x400				

640x400 is possible in interlace mode when using an RGB monitor and can be pushed to 768x480 or 768x240 by enabling overscan mode.

Memory requirement of display modes

2 colours: 16 colours: 256 colours: True colour:

Record and play



Music maestro
Ian Waugh takes
an in-depth look
at the Falcon's
direct-to-disk
recording abilities.

The Atari ST stood the music world on its head by including a MIDI interface in its design. It brought affordable MIDI control to the masses and played a major part in the development of sequencers. The Falcon could well do the same for direct-to-disk (d-t-d) recording.

It has a built-in DSP (Digital Signal Processor) chip, the Motorola 56001, which operates at 32MHz and which can be connected to all kinds of external peripherals. Among other functions, the chip can convert analogue audio signals into digital ones and vice versa. Every other computer currently on the market with the exception of the AV Apple Macs require an additional piece of hardware to do this.

The Falcon also has an eight-channel 16-bit digital DMA sound port with up to 50kHz sampling rate plus stereo DMA audio Ins and Outs. Put it

all together and you have the foundation for a very affordable d-t-d computer.

It seems natural, therefore, that cost-conscious musicians are looking to the Falcon as an affordable d-t-d solution and it's not surprising that many music software companies have produced some quality d-t-d software for it.

**Every other current
 computer requires
 additional hardware
 for hard disk recording**

Current programs

Current d-t-d software falls into three camps — tracker programs, multi-track digital recording software and programs that combine MIDI sequencing with digital recording.

Aimed at the high end of the market, DigTape offers a modular, dedicated approach to hard disk recording.

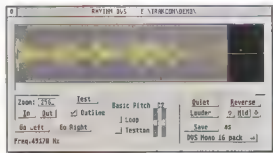
Trackers are great fun and offer an alternative way of making music to MIDI. They use samples which can contain instrument or vocal sounds, and even complete bass and drum loops so you don't have to be a master musician to put a piece of music together.

TrackCom (£79) from Compo supports up to 10 tracks and includes a sample editor. There are also some shareware and public domain trackers such as Stormtracker, which uses music notation, and Octalyser, which supports eight tracks.

The most popular Falcon d-t-d application is digital recording. Clarity 16 Falcon (\$99) from HiSoft builds upon the success of the ST Replay samplers and is ideal for experimenting and messing about with samples.

Audio Tracker (£159, from System Solutions) is slightly more upmarket, being an eight-track digital recorder.

Compo's TrakCom — up to ten tracks plus an integrated, though basic, sample editor.



GD24 47/XX was one of the first d-t-d systems to appear and offers four tracks and built-in FX.





with a mixer and effects unit. The wave editor allows non-destructive editing.

Audio Master (£199) also from System Solutions is a stereo mastering system aimed at the pro end of the business with features such as non-destructive editing, real-time cross fades, loop functions and sophisticated marker handling. You can expand the program by adding Equaliser (£249), Analyser (£199) and MIDI sync (£99) modules although for a more modest £199 you can get a cut-down version of the three modules with Audio Master Lite.

D2D 4T/FX (£299) from D2D Systems was one of the first d-t-d systems to appear and the design is a little chunky. It's a four-track system with built-in FX. DigiTape is another program aimed at the higher end of the market with a price to match - £499. It has lots of features but it really needs a few more to justify the price.

MUSICOM 2 (£79) from Compo works in mono or stereo and lets you

create a song by assembling sections of recordings in a playlist. It has a handful of effects but these permanently alter the file version 1 (£49) is still available but you would be doing yourself a favour by paying the extra for version 2.

Integration

For many musicians, being able to add digital audio to their MIDI tracks is the ultimate in music production. Steinberg was the first to offer this with Cubase Audio (£799) from Harman which now supports up to 16 audio tracks integrated seamlessly with the sequencer's MIDI tracks. You can mix down any number of tracks into a mono or stereo track and effects. The Time Stretch function can change the length of a recording without changing the pitch.

Emagic's Logic Audio (£508) from Sound Technology is another top-end system and choice between this and Cubase Audio is very much down to personal preference. It has a potential of eight audio tracks and includes an 8 into 2 mixer which mixes the audio tracks into a stereo output. The Digital

Falcon lets you change the pitch without changing the length and vice versa and there are functions to help you match the tempo to an audio recording and create a MIDI Groove from the audio data.

The Falcon is well equipped to handle digital audio and there are lots of d-t-d programs available to suit everyone from the hobbyist to the professional musician. It could well do for d-t-d what the ST did for MIDI.

What's d-t-d?

D-t-d or direct-to-disk recording is the process of putting audio signals onto a hard disk. To do this, the signals must be converted into a digital format using an A-to-D (Analogue-to-Digital) converter. A D-to-A converter reverses the process.

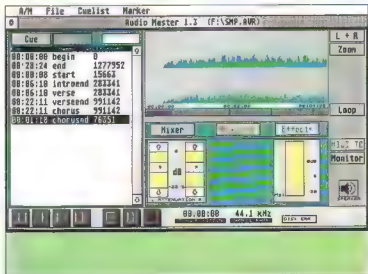
The conversion process is similar to that used by modern samplers but whereas samplers store their data in RAM, with d-t-d, data is saved directly to a hard disk. During playback it is read from the disk and converted into an audio signal on the fly. This means that the only limit to the amount of audio you can record is the size of your hard disk, not the amount of RAM in your machine.

However, digital audio does consume a lot of disk space. Around 10MB of disk space is required for one minute of CD quality stereo sound recorded with a sample rate of 44.1kHz with 16-bit resolution. You can record at a lower sample rate to save disk space or the number of bits but this brings a noticeable drop in quality.



MUSICOM 1 (above)

gives you some fancy DSP effects, but no hard disk recording. Audio Master (right) includes non-destructive editing and real-time cross-fading.



Contacts

Compo: 0144
800 400 000
Harman Audio: 0161 7
MSE: 01525 71816
Sound Technology: 01462 440001
System Solutions: 01753 832212

Mods for rockers

Before you rush out and buy a Falcon, if you haven't done so already, there are one or two things to be aware of.

The original Falcon architecture had a few features that were inconsistent with the computer's d-t-d aspirations. In other words, bugs to you and me.

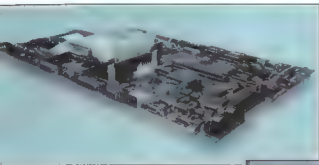
In particular, modifications need to be made to the CPU clock to prevent distortion and you may want to remove the bass boost and make the audio sockets line level.

Companies such as System Solutions will perform the mods on any Falcon they sell and if you have an unmodified machine the company will fix it up for you.

Come In Number 2



With Atari showing no sign of further Falcon development, it has taken a German software company to see the potential in the music market. Only a few months after the initial announcement, the Falcon Mk II is now shipping as Ofir Gal finds out...



C-Lab has added a SCSI board to support an internal SCSI drive.

The casing remains the same – but the logo has certainly changed!

The C-Lab Falcon is aimed directly at the MIDI musicians who need a working solution for direct-to-disk recording. C-Lab engineers studied the problems experienced by users of applications like Cubase Audio and soon devised the appropriate solutions. The

audio circuitry and SCSI interface have been improved to ensure high quality audio and fault free disk access.

The new machine is essentially an Atari Falcon that has been customised to meet the demands of the professional musician. The spec is the same – the machine is no faster with the same graphics and casing – and in looks identical to the Atari Falcon except for the C-Lab badge at the top of the keyboard



The Falcon Mk II ships with the full 14.2 Mb of RAM and an internal 514 Mb SCSI drive with ICD software pre-installed. The improved audio board is now properly adjusted to line level suitable for direct connection to -10dB equipment. The analogue signal is now insulated from interference prior to the digital conversion and the D-A converter has a dynamic anti-aliasing filter optimised for higher sampling rates than the Atari original. Compatibility was maintained by using a higher spec board from the same manufacturer used by Atari itself.

I only had a short time in which try out the new Mk II but one thing is immediately obvious – the audio quality is much improved when compared to my Atari Falcon. The bass boost is gone, along with the odd clicks and extraneous dirty noise. I tested the system by recording and then playing back eight simultaneous tracks and the Falcon performed faultlessly.

A vision for the Falcon

I spoke briefly with Burkhard Bergerhoff, the man behind C-Lab Germany about the company's plans for the new Falcon. He explained that at first C-Lab will be looking at music applications. Its next projects will include various add-ons to provide the Falcon with a SMPTE interface, digital I/O and ADAT compatibility among others.

C-Lab recently decided to co-operate with its long-standing rival, Steffenberg, and the two competitors could even be seen sharing a stand at the '95 Musikmesse show in Frankfurt.

"C-Lab will now work together with Steffenberg to ensure reliable operation of Cubase Audio," said Burkhard. "We are also looking at the possibility of making the Falcon more ST compatible so that devices like the Mixer will work with it. We will do everything we can to make the Falcon into the ultimate music workstation".

Here in the UK

Digital Awareness is a new company set up to handle the distribution of the new Falcon in the UK. Part of the Digital Village group, Digital Awareness is headed by Paul Wiffen, a long-time Falcon user and highly regarded music journalist.

"I was offered the UK distribution because the idea for the C-Lab Falcon came about through discussions between Burkhard Bergerhoff of C-Lab and myself," explained Paul. "His original plan was to create a PC based music and digital audio workstation. He became disillusioned with the idea because musicians don't really want to worry about AUTOREK, BAT files and MIDI drivers. The Falcon had the obvious advantage of being music-ready, with MIDI ports and built-in 16-bit audio."

"When I demonstrated just how powerful the Falcon was when running Cubase Audio, he called it 'The best kept secret in the music industry'", recalled Paul.

Asked about future development of TOS, Paul replied: "To retain 100% backwards compatibility, we are shipping TOS 4.04 on all machines because it works fine with musical applications. The C-Lab licence allows any modifications to both hardware and software and one of the things we are looking at first is how TOS can be improved. We are also looking at adding a second DSP and a separate video card."

"When I became the distributor for the C-Lab machine I knew nothing about non-musical applications and have spent the last six months educating myself. I have become a real fan of programs like Apex Media, Video ST and Papyrus. I have also joined CIX, the UK conferencing system, and I look forward to mixing with the Atari on-line community".

FALCON MK II

C-LAB

Specifications: 14.2MB RAM, 514Mb internal Quantum SCSI drive
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 UK Distributors: Digital Awareness
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Bird on a

Ever wondered how far an Atari can take you towards your own publishing empire? Nial Grimes explores the Falcon's colour DTP potential.

Most modern Atari packages support Falcon screen modes, but older software will need to be upgraded



Very few computer applications rely on colour as heavily as desktop publishing. After all, the computer screen is the only thing that lies between a document and an expensive imagesetting mistake. Much the same goes for all of the other stages along the way: scanning, retouching, graphics design and image processing.

Current pricing means that it's usually cheaper to buy a Falcon than to improve the ST's graphical prowess. And not only does the Falcon provide improved graphics, but it has the muscle to throw them around too - in terms of raw processing power, it is about four times faster than a standard ST. The built-in digital signal processor (or DSP) can also raise the performance curve when it comes to decompressing JPEG

images or working with filters. The immediate advantage of a Falcon is being able to work on colourful images at a pixel level. On paper, the Falcon's 15-bit 'true colour' display looks well short of the 24-bit colour used by most colour files (it's the difference between 32,768 and 16.7 million colours).

However, in practice the difference is barely noticeable. Retouching with packages such as Studio Photo, Repro CD and Chagall is more than just possible on a Falcon - it's a pleasure! You'll also find that most retouching packages are faster in true colour because the computer isn't forced to devote precious time to dithering. The only drawback is the limited space offered by Falcon true colour modes, take a look at the 'A la mode' box for all of the gory details.

Most of the same advantages are apparent when working with image processing effects. On an ST it's hard to see the results of a speed-blur or contrast adjustment but in 256 colours that situation changes completely. More subtle effects do require a switch to true colour, but by using a magnify tool you can get a good overall idea of what's

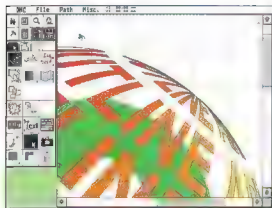


A screen expander is an essential purchase - even the software version of Blowup can yield some impressive results.



Some packages, such as Floppyshop's soon-to-be-released Positive Image, benefit from the power of the DSP.

wire



going on. Some image processing packages take advantage of the DSP to speed up image loading and filtering – Studio Photo supports the Brainstorm JPEG loader and Positive Image (preview, page 27) uses the DSP in many places

Colour clash

With perfectly adjusted images sitting on your hard disk, the need for oodles of colours on screen is less intense. Just as well really, because desktop publishers benefit more from extra screen space – BlowUp or ScreenBlasters make a real difference. The best policy when working with colour documents is usually to do the bulk of the work in a 16-colour mode and then make any final adjustments with the full 256. This makes sense from both a speed and memory perspective, because the processor advantage offered by the Falcon is quickly eaten up by colourful screen displays containing many times the data of ST resolutions.

Having spent money on a machine with true colour potential, even the 256 colour limitation may seem annoying but when you see just how well some packages can use those colours, it's really not a major problem. To be honest, you are not going to get much closer to the finished output without thinking about monitor calibration.

No doubt you also use a vector graphics program in tandem with your desktop publisher and these too are improved enormously by a decent colour graphics mode. Most of the

Outline Art users are stuck with a 16-colour display, but the dithering is very effective.

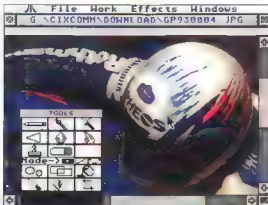
DA's Vector Pro is perfectly at home in most Falcon resolutions, including those from by BlowUp and ScreenBlasters.

Retouche CD makes superb use of the Falcon's 256 colour modes – true-colour can also be used on an RGB monitor.

graphics programs will deliver a colourful display on the Falcon, DA's Vector among them. Outline Art 3 is stuck with 16 colours, but the quality of dithering is good and a big improvement over a mono ST.

The Falcon also holds other benefits for the desktop publisher, primarily the ability to manage memory effectively. Calamus documents are enormous by nature and a single true colour image can stretch to many megabytes. The Falcon's 68030 processor allows the use of virtual memory – disk space that the computer thinks of as normal RAM. You do pay a speed penalty and the software itself is around £80, but it does open almost limitless horizons in terms of both image processing and DTP.

The Falcon is a remarkably sound proposition for the semi-pro desktop publisher. It's an arm and a leg cheaper than a TT with graphics card and yet provides a reasonable degree of the power. If you already own (or can afford) the software to take advantage of the extra potential it's an excellent upgrade choice.



Choice colour!

Calamus runs in three colour modes on the Falcon. Let's take a look at what you can expect from each.



The standard ST-style display is fine for mono work, but isn't much help when choosing coloured tints.



The basic colour structure is easy to see in 16 colours, but more is needed for a faithful representation of the image.



Given a 256-colour display, Calamus SL can get to work in providing a reasonably accurate display.

A la mode

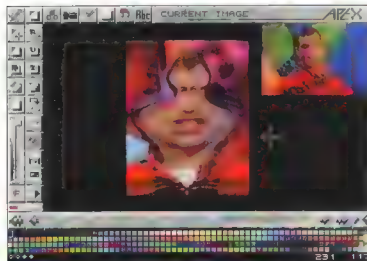
The standard Falcon offers quite a range of different screen resolutions and colour depths, but those of primary interest to DTP are 640*480 in 16 or 256 colours and 320*240 (or 320*480) in true-colour. Higher true-colour resolutions are only possible on an RGB monitor and the flickering, interlaced display makes it less than ideal for professional use.

These modes seem like a huge jump up from ST high resolution, but it doesn't take too long to realise that still more space is useful for colour DTP. Thanks to the flexibility of the video hardware, software alone can yield some impressive results – Calamus SL runs very nicely in 800*600, and the refresh rate of just under 60Hz is reasonably stable. For higher frequencies and resolutions, you need to look at some hardware. BlowUp and ScreenBlasters are the two premier choices and both can give you a wide range of usable modes for well under a hundred quid.

Another alternative is to use a virtual screen, which provides many pixels without requiring a special monitor or affecting the refresh rate at all. All versions of BlowUp include this facility and some alternatives are also available in the public domain; a fifty little French program called Bldwings is certainly worth a look (Floppystop disk number F4783).

Follow the DSP code

The Falcon's DSP really can make a difference. Programmer Douglas Little demonstrates its many talents...



The Atari Falcon030 has been around for a few years now and we have seen a number of new programs emerge that claim to

be revolutionary in their use of a special chip known as the DSP 56001.

This is all very well for programmers and the technically inclined but what does this really mean? How exactly can one more bit of silicon make a difference to performance or benefit the user in any way?

Before we set about trying to answer this let's look at the DSP in some

detail. DSP is short for Digital Signal Processor. What's more, it's a 24-bit RISC device for processing digital signals. I'm not going to get into a major

technical discussion about RISC (Reduced Instruction Set Computing) but the idea is that you make a processor's design simpler in order to make it perform operations

a faster – the problem is that you sometimes need more operations to make up for the new simplifications. Catch 22!

The real point is that you don't always need to compensate in this way

"DSP image viewers and converters can even outperform 66MHz PCs."



Apex contains a special field-warping engine written entirely in DSP assembler which allows the user to define magnetic lines to distort or even morph images together.

– especially with arithmetic calculations that are needed when processing signals. This is why the DSP has to be RISC – otherwise it would either be too slow to keep up with the incoming information (especially in real-time audio applications) or it would be too expensive to use as a secondary chip.

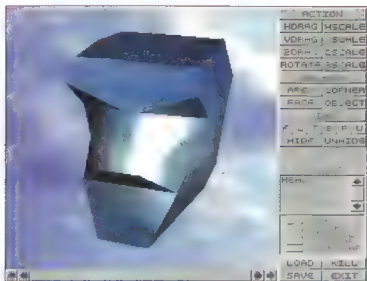
The Motorola 68030 on the other hand, which is the Falcon's central processing unit, is based on a CISC (Complex Instruction Set Computing) design which is quite different. It's a really complex system that is slower as a result. I'm not referring to the fact that the DSP has twice the MHz rating of the CPU – the DSP is still much faster even at 16MHz.

BOBTracker, uses the DSP to generate four channels of sampled sound.



Perspecta feature-mapping effects at high frame rates mean exciting games like *Wolfenstein* and *Doom*.





Little engine

The digital signals we are dealing with here include audio (samples), video (graphics) and communications (modems) as these are the most common types of electronically transmitted information. The DSP processor acts like a little engine, responding to commands from the main CPU (the 32-bit 68030) and carrying out repetitive tasks very quickly indeed. It can effectively receive, dismantle, modify, reassemble and transmit signals one element or "particle" at a time at a horrendously high rate. This makes it ideal for synthesising musical instruments, sound effects and other audio applications.

Unfortunately, many programmers have not been looking outside the boundaries implied by the term Digital Signal Processor and seem to support the device only when it fits the job description exactly. This is a great shame and as a result the Falcon's hardware has been vastly underused.

It is becoming obvious that the exclusively one-way dash programmers have made from native assembly language to C in the last few years has left very few of them with the combined skills required to make efficient use of such hardware. It has nothing to do with how good or bad the C language is as some of the best programs have a balanced mix. It is more to do with the fact that DSP processors cannot be programmed properly without assembly language and it's a diminishing trade.

The DSP excels at 3D graphics. Here we can see a standard Phong-shaded image (with some surface attributes) displayed in one of our model editors. What you can't see is that the image is drawn in real time once every second!

Good news!

The good news (yes, there is good news!) is that programmers are at last beginning to see the light and programs are trickling out which make use of the DSP for other purposes. There are now several JPEG image viewers and converters available that can outperform 66MHz PCs due to the chip's ability to perform the arithmetic required for JPEG decompression so quickly.

Apex Media has 20 or so DSP programs embedded inside the code, more than half of which would not be present otherwise or would at the very least have been irritatingly slow. As a result, images can be morphed together to produce a frame in seconds or a whole animation in minutes, eliminating the need for low-quality preview modes - something even the fastest PCs are hard pushed to manage!

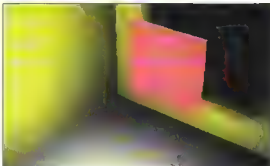
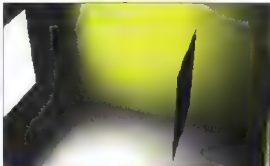
The next big step is the world of 3D graphics. DSP chips can chew up the complex maths involved in 3D calculations at a rate that many programmers will find difficult to believe. In the near future, we can expect to see rendering programs which produce images in seconds - not hours or days. One of the things we have been developing at Black Scorpion is a real-time renderer which can draw light-sourced, texture-mapped images at very high speeds. Small fractions of a second in fact.

The quality is not what you would expect of a full raytracing or rendering



package but the ability to move around these scenes in real-time is something new, especially for the Falcon. This sort of technology is very useful for games and, to be honest, any 3D Falcon game which does not perform more than 50% of its calculations on the DSP is a sad waste of a good opportunity.

So if you are a programmer, get a reference manual and get cracking! And if you're not, find one and threaten to confiscate their hard disk (or worse) until they agree to learn DSP code. It's definitely worth the effort.



What the DSP's good at...

Audio

- Synthesis
- FX processing
- Filtering and noise reduction
- Analysis and audio transforms
- Sample compression and decompression

Video and graphics

- Bitmap translation into other formats
- Dithering and colour reduction
- LZW type compression and decompression of GIF and TIFF files
- Decoding and encoding compressed JPEG images
- Decoding and encoding MPEG (compressed video) data
- Rotation and scaling of bitmaps
- Morphing and magnetic distortion

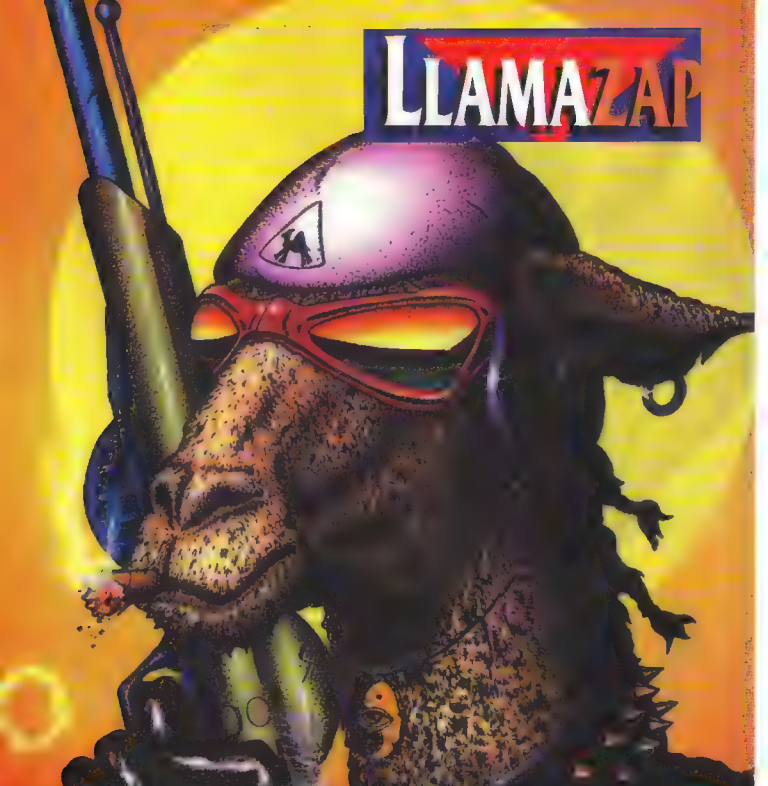
3D graphics

- Rotating and adding perspective to 3D objects
- X, Y and Z-Clipping of polygons
- Generation of curves, polygons and voxels
- Sorting and spatial bounding of objects
- Real time Gouraud and Phong shading
- Real-time floor and wall mapping (Boom style)
- Real-time FOVH (Free Directional Texture Mapping)

This example demonstrates texture-mapping, simultaneous Gouraud and Phong shading. The image is redrawn once every two seconds in this mode. If the shading is disabled, the frame rate jumps to 20 frames a second!

These two snapshots of a strangely lit polygonal room were calculated using a very intensive algorithm known as radiosity. It is normally avoided as it is even slower than raytracing. Here, however, the DSP is displaying the room from the radiosity data in real time at a rate of about 10 frames every second. It's not true real-time radiosity but it's pretty close...

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Q&A

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Upgrading To A Falcon



Q I am a 30-year-old computer programmer on IBM mainframes and married with kids. I have an Atari 516 upgraded to 4Mb, external floppy drive, Philips monitor. Protar II 120Mb hard drive, Switchable TOS 2.06 upgrade, IBM Proprinter and NVDI 2.5. I have built up my system over a three year period and am very happy with it.

I will be totally honest and say that its main use (for the kids and me) is to play games on, although I do all of my home accounts, letters, double in the occasional DTP poster, art, and, if my wife would let me spend a bit more time on it,

I fancy trying some games programming. Bearing in mind the system I have at the moment, I would like to know just how much of the equipment I have would work on the Falcon. I am toying with the idea of buying a 1Mb Falcon with no hard drive and then using the four 1Mb SIMMs to upgrade it.

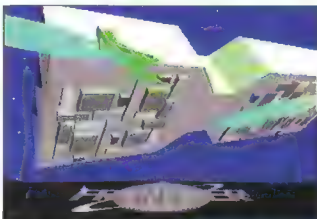
I would also like to connect my external Protar drive to the Falcon, so giving me a 4Mb RAM, 120Mb hard drive Falcon system. I know I should be able to connect my printer as it's an industry standard, but what about my external floppy drive, and finally and really most important, how compatible will my software be? I have heard about the "Backward" utility, but would that work with most of my games? The software that I use most is

Send Us Your Questions

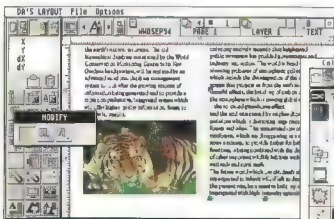
Can't find anyone to answer that nagging question? Then drop us a line. Our team of experts are on hand to investigate and solve almost anything you can throw at them. Just send your letters to:

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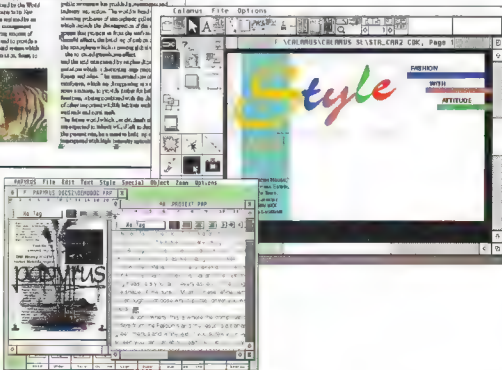
While every effort will be made to answer your question within the pages of either Atari World or Atari Pro, please note that individual correspondence cannot be entered into.



If you want to play games like Frontier Elite then forget about the PC and a Janus card!



While Tmeworks 2 has problems on the Falcon, Calamus (far right), DA's Layout (above) and Papyrus (right) are fully compatible.





The Janus card for the PC does sound interesting, and might give me the best of both worlds. So would I be better buying a Falcon or should I get a PC with a Janus card - will this then give me 100% compatibility with my existing software?


M. Moore, British Forces

The Falcon cannot take SIMMs directly; you will need an adapter in order to tray to use your old memory. There are several such boards on the market including offerings from System Solutions and Gasteiner Technologies. But there is a very real possibility that your SIMMs will be incompatible with such a board as the

As for the Janus card, this is not an ideal solution and compatibility would certainly not be as good as with a Falcon. It is also much slower than a Falcon, so I would not recommend it unless you actually prefer a

I have no problem getting them running together, so I know it's nothing to do with parity settings or termination resistors. But whatever I do with the SCSI ID numbers of the drives, either one of them is unrecognised altogether or the internal one boots first. The manual seems to cover everything but this!

Take a look at the accompanying diagram. When all switches are set to the "ON" side, the drive will be assigned an ID of 0. If switch 3 only

 I purchased a second hand Minix-ST (UNIX Clone version 7) operating system written by Prentice-Hall. Could you please tell me if a company or a user group is supporting it? If so, can you give me their address as I would like to upgrade to a newer version. I am running a 5205TFM with various modifications: 4Mb RAM, Overcam, Turbo 25 accelerator, NVDI, TOS 2.06, Magic OS, 270MB hard drive and a Star LC-10 9 pin printer.

Mark Coulson, Surrey

Perhaps you may want to consider MINT as an alternative? It is also very similar to UNIX in many ways and has a good range of shells and utilities. Linux has also been ported to the Atari range, but you need at least a TT or Falcon to run it. Iain Laskev



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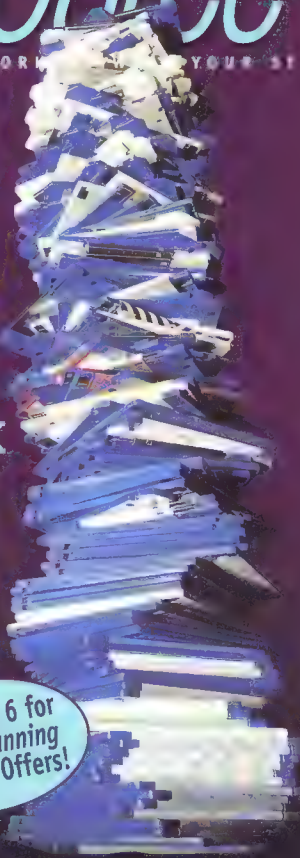
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- 12** **Desk Accessories** – ten essential utilities
- 14** **Language Barrier** – make your ST a jargon-free zone!

See page 6 for some stunning Readers' Offers!





A new beginning

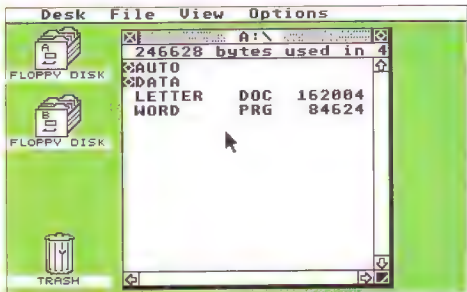
Welcome to ST Source, Atari World's beginners' section. Over the next few months you'll find articles explaining different aspects of your Atari, from simple tasks like making a boot disk, to step by step tutorials showing you how to get the best from your machine.

If it seems a strange thing to include when Atari STs have been around for almost a decade, just stop and think. Walk into Dixons and you're looking at a four figure sum for the latest all-singing, all-dancing IBM compatible PC. If you're on the first rung of the home computing ladder, you don't need one – and you probably can't justify the cost either.

This is why second-hand STs are selling so well. Ten years on, the ST still offers reliability, ease of use and a mature, enthusiastic marketplace full of knowledgeable people willing to help everyone else. The Atari world may be small – but rest assured Atari World won't be! Support us and we'll support you over the coming months in these very pages!

ANDREW WRIGHT
Assistant editor

Put the



Andrew Wright gets tough with his ST this month and gives away a few secrets about the booting process.

The ST's desktop – LETTER.DOC and WORD.PRG are in the root directory as they are outside of any folders.

What really goes on when you switch on your machine? OK, let's try and work it out. Make sure the floppy disk drive is empty and switch on your Atari. What happens? The screen goes white and the disk drive grinds away briefly – your ST is actually checking to see whether there's a disk in the drive.

After a minute or so, you'll see the familiar bright green screen and three icons labeled Floppy Disk A, Floppy Disk B and Trash. If you're using a colour monitor or TV, you will be in low resolution and the screen will be 320 pixels wide by 200 high. This is the default desktop that is stored in the computer's permanent memory, known as the read-only memory or ROM.

Put a non-game disk in the drive and press the reset button. Things get a little busier. Spotting the floppy disk in the drive, TOS rubs its little hands together – it knows it's got some jobs to do and it sets about them methodically.

First of all it looks into the part of the floppy disk called the Boot Sector. One of four things will normally be here. There could be a loader program. This usually happens if you insert a commercial game disk and explains why they often load straight away without you ever seeing the desktop. Secondly there could be a virus! After all, a virus is only a program. If there is you'll know sooner or later but not straight away. Don't worry about it for now.

boot in

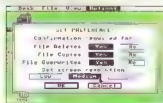
Thirdly, there could be some special code that produces a "virus free" message on screen when you boot with that disk in the drive. Many disks from PD

libraries are like this. If the message is there, the virus isn't – a bit upside down but it helps.

I did say four, didn't I? Well, the fourth thing is nothing at all. If you format a disk on a virus-free system the boot sector will be empty (apart from a few bytes used for technical information).

Low or Medium Res?

Assuming you've got your ST hooked up to a TV or colour monitor, you will have a choice of two screen resolutions: low or medium. All the screenshots here are in low resolution because they are easier to see for tutorial purposes but, in reality, medium resolution is better for working in as there are more horizontal pixels (640 by 200) which makes the characters clearer.



Changing screen resolution on a colour monitor or TV.

If you happen to have a mono monitor such as Atari's own SM124, you won't have any choice, but you don't need one – your screen will be crystal clear in high resolution (640 by 400).



Medium resolution has far more pixels.

On auto

After this procedure your ST looks for a folder on the disk labelled AUTO. If there is one, it attempts to run each

Desk accessories are programs that remain in memory, waiting to be called upon – a bit like a butler

program with a * PRG extension that it finds inside the folder (the three letters in the filename that come after the dot are called the extension). These programs are loaded in the order in which

they were placed in the folder in the first place. They are specially written to behave this way – don't expect your word processor to run from an auto folder! Often these auto programs will stay in memory, carrying out particular tasks such as speeding up the screen display.

Once the auto programs are loaded, the operating system scrutinises the root directory. Files that aren't in folders are in the root directory, but at this point your Atari is only interested in one particular type of program – the desk accessory. If it comes across a file with a * M extension it assumes it's a desk accessory (which it should be).

Desk accessories are programs that remain in memory, waiting to be called upon – a bit like a butler. Once the boot process is finished you can find their names under the Desk menu. Clicking on a name runs the desk accessory "program". Unfortunately the ST only normally loads six desk accessories; the first six it comes across. If you have more than six in the root directory the system can become unstable.

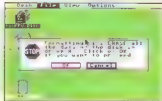
There's one more little thing that your ST does before it hands control back to you. It searches the root directory once more for a file called DESKTOPINFO. NEWDESKINFO in later versions of TOS. This contains a lot of information about your system: what colour the desktop is (if you have a control panel accessory installed), where the windows are positioned, which drives are available, which icons are where and much more. If it doesn't find one, you get the default desktop stored in ROM.

Formatting a disk

Boot your ST and when you see the desktop, insert the disk you want to format. It doesn't matter if you've formatted it before as long as there's nothing important on it.



Select the A FLOPPY DISK icon and under the File menu select Format...



You will get a warning just in case your best-seller is on this disk. Ignore it and click on "OK".



Next comes the disk formatting and copying dialog box. If you have an early version of TOS (this is an STe) it may look a little different but they are basically all the same. Where the dialogue says "Label", you can type the name of the disk – "BOOTDISK" will do – but it is purely optional. Make sure the double sided option is highlighted (you won't be able to if you have a single-sided drive) and also the Drive A button.

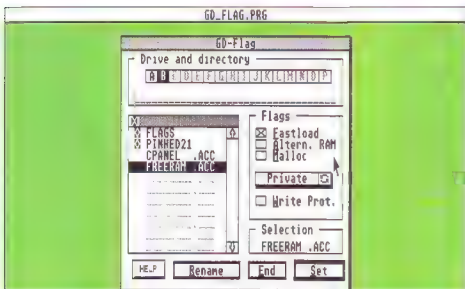


Clicking on "OK" starts the drive humming and the bar in the lower half of the dialogue box starts filling up, illustrating how much of your disk is formatted.



When the formatting is complete you'll see a dialogue box telling you how many bytes there are free on the disk. A disk in good condition will have 725,016 bytes free. You're now ready to roll and turn your newly formatted disk into a boot disk.

First move



GD_FLAGS, a freeware utility that keeps an eye on your bits!

Once you understand the boot process, it's time to put that knowledge to good use. On pages 10-13 you'll find lots of ideas about the programs you can put in your Auto folder and which accessories you might need. First of all, we'll show you how to make an Auto folder and put them all together on a boot disk in our two special step-by-step guides.

Once you've copied the things you want, it's a good idea to add that one essential ingredient - the DESKTOP.INF file. When you have the desktop looking the way you want it, with the relevant

Andrew Wright shows you how to sort out that boot disk once and for all!

Icon see clearly...

There are five types of icon in the ST's graphical interface: two on the desktop and three inside the windows. The drive icons, the ones that look like filing cabinet drawers on the desktop, represent the disk drives. Having a B drive may seem strange if you only have one drive but in fact it's a virtual disk drive and vital for file copying as you can see from the step-by-step!

The other desktop icon is the trashcan or wastebasket. It's pretty efficient at waste collection too - as soon as you let go, it's gone! I wish my local refuse collectors were that good...

Inside the windows are three icons: one for folders (with a small tab), one for programs (with lines across the top) and the other for ordinary data files (it looks like multiple pages).



The various icons in the ST's interface.

Creating an Auto folder



An Auto folder is no different than any other folder – it just happens to be called AUTO, that's all. Make sure you have selected the boot disk window and that the root directory is visible (you're not inside any folders. Under the File menu select New Folder.



In the resulting dialog box, type in the word **Auto** – it will appear in upper case but it doesn't matter how you type it. Click on "OK" and the folder will be created.

tools where they're most accessible and the windows in the position and viewing style you've decided upon, you can look under the Options menu for the Save Desktop command. This will save everything so that next time you boot with the disk, the desktop will look the way it was when you saved it.

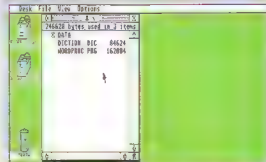
One last thing. Try out your boot disk and see what happens. There's a feature of TOS that causes problems with some programs, making the system hang up for no apparent reason. This is the fastload feature.

The idea of the fastload feature is that programs and accessories can be forced to load into memory (RAM) more quickly by not checking to see whether the memory they're loading into has been properly cleared.

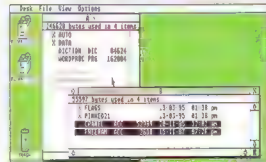
This is achieved by what is known as a program flag – basically the operating system looks at a specific byte in the program's header file and works out whether a particular bit is set or not.

All you need to know is that there are a number of freeware programs around (including one from Atari itself and GD_FLAGS as pictured on the opposite page) that will let you examine the fastload bit and reset it if you experience problems. If you're getting frequent inexplicable program or accessory freezing, try and get hold of one of these utilities from your PD library.

Creating your boot disk

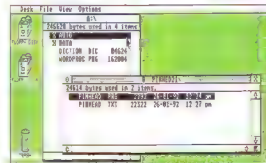


Create an **AUTO** folder. If you don't know how, consult the guide to the left. Now open a window onto the second disk by double clicking on the FLOPPY DISK B icon. When prompted, remove your prospective boot disk and insert the floppy disk with your accessories or Auto folder programs on. They may be on several disks – choose one for now and then repeat the steps for each disk. Notice that you can now see the contents of both disks even though you only have one drive. If you have two drives things look much the same except you don't have to swap disks so often!

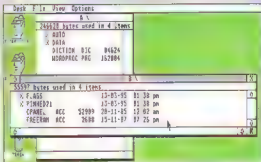


The best thing to do is to follow the on-screen prompts from hereon in. You'll be asked to confirm that you want to copy the files (unless copy confirmation is switched off under Preferences) and told when to swap disks. All you've got to remember is which disk is which!

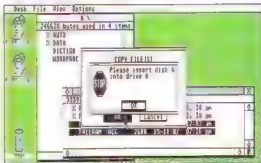
In this case, A is your boot disk and B the master disk your accessories are on – keep this one write protected by opening the little black plastic tab at the bottom of the disk so that you can see through the hole.



You can format a disk, if you haven't already done so, or turn any existing disk into a boot disk. Always use a backup copy though – if anything goes wrong, all you do is start again. In this example, I'm about to turn my word processor disk into a boot disk. Note that the word processor files won't be touched – I'll simply add accessories and Auto programs and still be able to run the word processor.



Select the accessories you want to copy to your boot disk. If you want to select more than one, hold down the Shift key as you select them. When they are all highlighted, click once more on one of them and hold down the mouse button. You can now drag an outline of the file or files anywhere on the screen but as we want to copy the files to the boot disk, let's not get carried away! When the mouse pointer is over the boot disk window, release it and the copying process will start.



With the accessories copied into the root directory, it's time to copy some Auto folder programs into the Auto folder. The principle is exactly the same. You can drag the appropriate program files onto the Auto folder icon itself until it turns black (or its name depending on how you're viewing the desktop) or open the folder first and drop the files anywhere inside the window.

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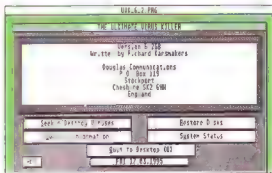
Get virus-free...

25 copies of
UVK, the Ultimate
Virus Killer, up for
grabs

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competition

UVK is the best virus killer for Atari computers – fact! Which other virus-killing package offers these features:

- Supports all Atari machines
- Intuitive mouse-driven software
- Works as a stand-alone program, desk accessory or XControl module
- Recognises and kills 83 boot sector viruses and 5 link viruses
- Recognises 1,532 different valid boot sectors



TO ENTER, simply tell us what the initials “UVK” stand for – what could be easier! A special draw from the survey entries will be made – and 25 of you will receive a copy of UVK!

Now go to page 44 in Atari World,
write the answer in the “UVK” box, fill
in the survey and send it back to us!

Let's automate...

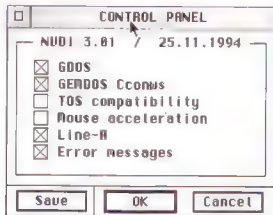
Got a new AUTO folder? Wondering what to put in it? Denesh Bhabuta pops up with some ideas...

How many times have you wondered what you could do to enhance your system and improve the way it works? Most of us want to do things that little bit more quickly or that little bit more conveniently and one way is to choose the right auto folder programs. Upgrading the software side of your system in this way is very easy. Just imagine being able to work with more windows than the normal limit of four or having keyboard shortcuts available at your fingertips. How about putting in a new all-singing, all-dancing file selector – or even speeding up your machine? Drooling yet? Well, read on.

Let 'em Fly

Let 'em Fly is one of those special utilities that has never been off my boot disk. It adds extra features to dialogue and alert boxes such as assigning a keyboard shortcut indicated by an underscore or coloured character. Alert boxes are much nicer looking and both dialogue and alert boxes can be dragged around the screen using the mouse.

The program also adds an extended editor for editing text fields in the



NVDI can be configured easily...

dialogue boxes, selecting special characters and making boxes snap to the mouse pointer.

Screen accelerator

NVDI is my choice in this category. Before I used NVDI, I wondered what all the fuss was about but, believe me, it is one of those programs that you just have to use once and you'll be hooked for ever. NVDI speeds up your Atari's screen display by three or four times making it look and feel as if you've just added an accelerator board!

Windows and dialogue boxes just open and close with a blink of your eye and text and graphics scrolling and display are much faster. Version 2.5 is recommended for floppy users, version 3 for those with a hard disk.

WinX

WinX changes GEM's window management routines, removing many of its shortcomings and giving you a much enhanced system to work with. WinX provides luxuries such as up to 40 windows on screen at any one time and extra window management commands. Windows at the back can be controlled using the right mouse button without bringing them to the front and they can also be moved beyond the edge of the screen. Other features include the



A background window being moved with WinX installed.

ability to resize the windows in real time and putting a window to the background just by clicking on the title bar.

WinX requires another program, GEMRAM, to be present so it isn't recommended on Atari's with less than 1Mb of memory.

TOS patches

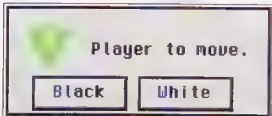
Each different version of TOS brought its bugs. Most minor bugs were discovered fairly quickly and Atari released fixes, in the form of small auto folder programs, into the public domain.

Essential for all TOS versions is Folderxxx which overcomes a memory bug. The serial port has had consistent bugs throughout the different versions of TOS and so there are different patches for each one. Finally a sound and LAN port bug in the Falcon's TOS can be fixed by Fpatch2.

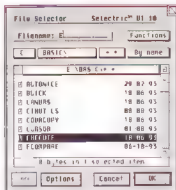
File selectors

The file selector in GEM leaves a lot to be desired – it is hard to navigate from disk to disk and find files in a hurry. Considering how often you use it, it makes sense to install a better one.

Enter the best replacement of all, Selectric, with extensive features and a nice interface. It is mouse driven with comprehensive keyboard shortcuts and includes file manipulation functions, such as delete and copy, and a search facility with wildcards. Selectric also



Let 'em Fly shortcuts can be indicated by an underscore or coloured first letter.

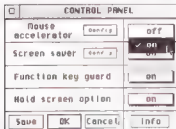


Just look at that pretty interface. Everything is just a mouse click away with Selectric...

has the ability to load several files in one go with those programs that support it

Mouse accelerator

If you are using the Atari mouse then you probably drag the mouse to the end of your desk just to get the pointer ball



Configure the mouse acceleration according to your requirements.

way across the screen. What you really need is Silkmouse.

Silkmouse is the definitely the smoothest mouse accelerator available and it really makes the pointer fly when you need it to but retains pixel-perfect control when you need accurate selection or pointing.

Fast loader

Pinhead is a very tiny program that reduces the amount of time it takes to boot the computer, especially if you have several auto programs and accessories. Every program that loads after Pinhead will load a lot faster than

before. Pinhead even fastloads itself! Just place it in the auto folder, preferably as the first program of all, and reboot. Simple!

Fast printing

Sprint 1.2 is a print spooler that will store the print output from a program and hold it in memory until it can be passed to your printer via the appropriate port, usually the parallel port. Not only does this mean you print much faster but you can also return almost immediately to your program and get on with something else in the meantime.

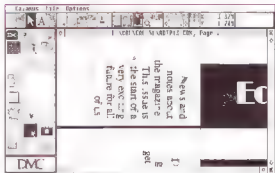
Sprint is best run from an Auto folder (though it can be run when needed from the desktop) and comes with a configuration accessory for setting various parameters, including the size of amount of memory to be set aside. It works best with slower printers such as inkjets and low end lasers.

Setting the time

The date and time are lost every time the system is switched off. Unless you have a hardware clock fitted, your ST will always boot up with the same time and date. If you want to find the file you saved last Wednesday, this always presents a problem. So why not have the computer remind you of the time in the time at each boot-up? Get Set Clock!

Mono or colour emulator

The ST is an all round computer so many people buy a monitor which can run the majority of software, in this case a colour one capable of low and medium resolutions. Some programs require a mono monitor but rather than going out to buy a brand new monitor, you can use a mono emulator instead. SeBra is a good choice that works quite fast, compared to other emulators, and even takes advantage of the blitter chip if it's present. And if you want to run colour programs on a mono monitor, check out BigColour. To give you an idea, the emulator pies on this page accurately reflect the emulated screens

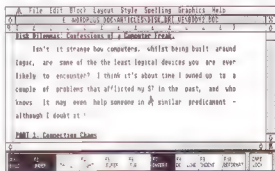


SeBra running in high resolution mode on an Atari colour monitor...



.. and with some additional colour into the bargain.

.. and there's always a colour emulator for mono monitors too, in the shape of BigColour!



You can speed up your printing courtesy of Sprint (left), or even have your ST remind you to set the correct time at start up!



Where to get them...

GENRAM 1.6/WinX 2.2, Freeware: Floppypshop, 01224 586208
Let 'em Fly 1.20, Freeware: Goodman, 01782 335650
Pinhead 2.1, Shareware: Floppypshop
SeBra 1.32, Freeware: Floppypshop
Selectric 1.10, Shareware: Goodman
Set Clock, Freeware: Goodman
Silkmouse 3.2, Shareware: Floppypshop
TDS Patches, Freeware: Fast Club Disk UT350, 0115 945 5250
HVDI 2.5 £29.95: System Solutions, 0181 693 3355
XBoot 3.10 £29.95: HESoft, 01525 718181

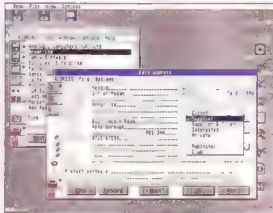
Fashion accessories

Steve Pedler presents a list of ten desk accessories you just can't afford to miss...

Look in any PD library catalogue and I guarantee you'll see dozens and dozens of desk accessories – often known as DAs for short. Unfortunately you can only load up to six at once, so how do you choose the best? Just for you we've got ten of the very best available. Some are free, others are shareware or commercial programs, but all of them are superb additions to your system

Address

Address is a superb shareware address and telephone number manager and a very attractive one at that. It can store everything you need to know about a contact is contained and even dial the person's telephone number if you have a modem attached. Address is a great example of modern GEM software, and



The main edit window of Address

although it's a large program, it will still run from a floppy disk. If you need to keep lists of names and addresses and have them handy when you're using your Atari, this is one of your best options

Chameleon

When you install Chameleon, it allows you to load another DA in its place. This second DA takes over Chameleon's slot in the menu bar. Then, if you wish, you can unload the second and load a third DA in place of that one and so on. Chameleon is a clever program that effectively allows you to bypass the six DA limit, although only six are still installed at any one time. Chameleon only occupies 3 Kb of memory which is incredibly useful if you suddenly realise you need that DA that you forgot to install and don't fancy rebooting.

Control Panel and X-Control

Control Panel was the first DA provided with Atari computers. It is an important accessory which allows you to set various system parameters such as the colours, keyboard repeat rate, the type of printer, serial port settings and so on



The original Control Panel (left) and X-Control (right).

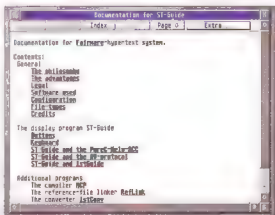
It has been replaced latterly by X-Control, the extended control panel which can load special programs called extensions (CPXs)

The beauty of CPXs is that they are not resident in your computer's memory, so you can have as many as you like, and load or unload them at will. Many different CPXs are available and some commercial programs (such as the screen accelerator NVDI) also come with a CPX to configure the main program. If you have a hard drive, X-Control is the better program, but if not you may find it easier to use the original Control Panel. Both are freeware.

ST-Guide

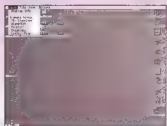
At long last, the ST has its very own hypertext help system like other graphical computers. To read these files, you need this shareware DA, which is

ST-Guide, displaying the contents page of its own help file.



What are desk accessories?

Desk accessories are programs that run inside your computer along with the main program you are running. They are accessed by clicking on the accessory's name in the first (usually called Desk) menu in the menu bar. They are loaded during the boot process and cannot be unloaded until you switch off or reset the machine. A DA can be used at any time, but there are some limitations – only six DAs can be loaded at any one time and they cannot be used from TOS-type (text only) programs.



A standard Desk menu showing accessory names

rapidly becoming an essential item, as more and more software is being supplied with ST-Guide format help files.

Darklord

This is a screen saver DA designed to prevent damage to your monitor if it



Darklord's main control panel.

shows the same image for long periods of time. It does this by providing an ever-changing graphical display so that the picture is never the same in one spot.

There are many screen savers around but Darklord is unusual that it is extensible and allows you to load alternative modules to give different effects on the screen. It is even possible for you to write your own modules for it. It gets into this list for a good reason. Firstly, it's well designed and attractive. Secondly, the author has generously made it freeware. And thirdly, I'm the author...

Image Copy

Sometimes you might want to take a snapshot of the image on the computer screen and save it to disk for future use. At other times you might want to quickly view an image on screen but not have the program that created it to hand. There are a lot of these screen grabbers around and while Image Copy is undoubtedly the best, to call it just a screen grabber would do it a serious injustice. It is much more than that; it is a superlative picture viewer that can load and save pictures in many different formats including JPG and PhotoCD (special version) and even catalogue images and display thumbnails. All the screenshots in this article were taken

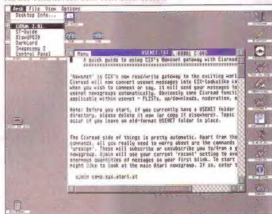
with Image Copy (Article? More like the entire magazine... Ed).

Diamond Format

The latest version of Diamond Format is supplied solely with commercial programs such as Diamond Back from HiSoft, but earlier, still very capable, versions are available as freeware. This is a disk formatter, intended to help you round that awkward moment when you have done some important and time-consuming work and suddenly discover that you don't have a floppy disk on which to save it. The solution? Call up this Diamond Format and sit back and wait for it to format a new disk.

EdHak

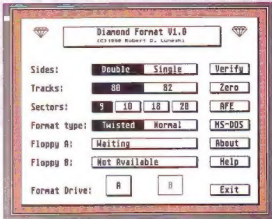
This is a text editor that sits patiently in memory until you need it. This can be extremely useful because you don't have to quit your main program if you want to write some notes or read its documentation file. It is extremely flexible and comes with a good manual for those who want to find out more about ASCII characters sets text conversion



from one computer to another and so on. EdHak also lets you examine and change the contents of your computer's memory (hence the 'Hak' part of its name), which is very useful for programmers. It is commercial but low cost.

Procalc

From Atari itself you no less, this is one of the best calculator DAs for the Atari and easily beats the buggy affair supplied with Windows on the PC. Procalc



The main display in Diamond Format.



The Procalc calculator.

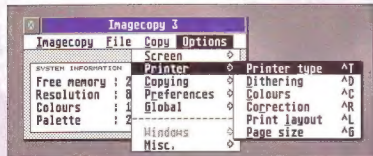
can operate in scientific, computer, and time calculation modes and has a number of useful built-in functions. It's also free.

Harlekin

This is, I suppose, the ultimate desk accessory. Harlekin combines a multitude of functions into one DA, including a superb diary/time manager, text editor, comms module, screen saver, disk and file management facilities (including a replacement file selector) and far more than I can list here! Its disadvantages include the large amount of memory it can take up and the inevitable fact that some of its modules are not as fully-featured as dedicated, single-purpose DAs. But it is still an excellent program with a well-designed user interface. Commercial software.

Where to get them...

Freeware and shareware programs are available from good PD Libraries and bulletin boards. The commercial programs can be obtained from: EdHak, £3.95, Douglas Communications: 0151 456 9587. Harlekin, £54.95: HiSoft, 01525 718181. Imagecopy, from £29.95: Fast UK 0115 945 5250.



Imagecopy, showing just some of the many options.

The Language

Atari World presents exclusive excerpts from Mark Baines' definitive A-Z guide to the Atari.

A

ACC

The file name extension for a desk accessory. The file extension (also called an extender) comprises the three letters after the dot.

Accessory

Special programs, also known as desk accessories, that can be loaded into the six desk accessory slots available from the Desk menu. They are normally found in the boot disk's root directory and are usually small utilities that can be used in any GEM program.

MultiTOS allows an unlimited number of accessories to be run from the desktop.

ACIA

Asynchronous Communication Interface Adapter. Two Motorola 6850 chips used for processing serial data (one bit after another) from various sources into the parallel form (eight bits together) required by the processor or memory. The first operates the MIDI interface and the second interfaces with the keyboard chip

which handles the keyboard, mouse, joystick and clock.

ACSI

Atari Computer Systems Interface. A subset of the SCSI commands designed for communication between peripherals and microcomputers and controlling the DMA port of STs and TTs. In the Falcon, the DMA/ACSI port is replaced with a full SCSI port.

ACC

The usual file name extender for an accessory that is not currently

File Name	Size	Created	Modified
ACCSYS	5166	09-02-93	08:59 am
ACSCSI	13678	28-09-92	03:01 pm
ACSCITM	7837	24-11-94	12:15 pm
ACSCIMD	45558	25-08-93	09:18 am
ACCLABS	5389	25-02-92	11:37 am
ACCL	13387	09-11-93	02:12 pm
ACCLC	13393	01-02-92	09:18 am
ACCLPDRM	24346	14-12-91	07:22 pm
ACCLCOL	18948	21-05-92	09:01 am
ACCLC	18788	24-08-93	12:12 pm
ACCLMD	17428	18-01-93	10:49 am
ACCLF6	7388	25-01-93	03:27 pm
ACCLF5	6434	02-09-91	07:22 pm
ACCLF4	45233	18-11-92	02:45 am
ACCLF3	9446	19-06-94	03:26 am

menu item. When the computer is re-booted, that accessory will not load.

AES

Application Environment Services. A part of TOS that provides the windows and iconic user

CPX and CPZ. Like the accessory files, CPX modules for the XControl Panel can be disabled by renaming them with the .CPZ file name extender. The XControl Panel will take care of that Options...Setup dialogue box.

AHDI

Atari Hard Disk Interface. Atari's hard disk driver software that controls the hard disk controller via the DMA.

AJAX

The floppy disk controller chip in later MegaSte, TT and Falcon computers capable of using and formatting high density 1.44 Mb and 2.88 Mb floppy disks. It is essentially an uprated WD1772 chip.

Alert box

A GEM dialogue box designed to bring something to the user's attention. There may be up to five lines of text each with thirty characters and a question mark, exclamation mark or stop sign icon. Up to three buttons can be used, normally including OK and Cancel.

APP

The file name extension for a GEM program like *.PRG.

ASSIGN.SYS

A file used by all types of GDOS to tell it where to look for GEM bitmapped fonts and printer drivers. The file should be stored in the root directory of the boot disk or boot partition.

File Name	Size	Created	Modified
ACCSYS	5166	09-02-93	08:59 am
ACSCSI	13678	28-09-92	03:01 pm
ACSCITM	7837	24-11-94	12:15 pm
ACSCIMD	45558	25-08-93	09:18 am
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ACCLF4	45233	18-11-92	02:45 am
ACCLF3	9446	19-06-94	03:26 am

installed and hence ignored by GEM at boot-up. A user can deactivate an accessory by renaming it to *.ACC using the Show Info

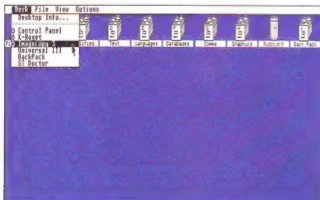
ACC and ACCX. A drive window showing a list of active and inactive accessories. Those with the *.ACC file extender are loaded into the system. Those with the *.ACCX extender are ignored.

interface of GEM, dealing with resource files, windows, dialogue boxes and menus.

AHDC

Atari Hard Disk Controller. The circuit board found in Atari's hard disk drives that interfaces the hard disk mechanism to the DMA port receiving commands from the AHDI.

You can select any of up to six accessories from the Desk menu.



A boot disk folder called Auto containing programs with the .PRG extender which are automatically loaded into the computer at boot-up and before the desktop is loaded. Such programs normally add additional functions to TOS or carry out fixes to its bugs.

B

BIOS
Basic Input/Output System. The part of TOS that provides the low-level screen and disk management functions for GEMDOS. It is essentially the interface between GEMDOS and the hardware and is concerned with screen output, keyboard, joystick and mouse input, printer output, serial port functions and the disk drives.

Bitmapped

Consisting of individual bits. A bitmapped font, for instance, has each character made up of lots of separate bits or pixels.

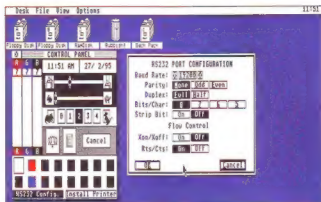
A floppy boot disk in drive A: showing the accessories (active and inactive), DESKTOP.INF and ASSIGN.SYS files and the AUTO folder.

[illegible]

cutable boot sector, that automatically runs one or more programs upon power up or reset and which contains accessories, the AUTO folder and the DESKTOP.INF or NEWDESK.INF file.

Bombs

When an error occurs, TOS displays a row of bomb icons across the screen warning the user of



The old Control Panel is still useful for setting up screen colours, the serial and printer port configurations. These settings are saved into the DESKTOP.INF file.

BLIT

Block Transfer or Block Image Transfer. The process of moving or copying a block of memory from one position to another. The method results in very fast transfers of data, particularly images.

Blitter chip

The Bit-Block Transfer Processor is an Atari custom designed coprocessor chip using blitting (see BLiT) to improve the speed of text formatting and graphic operations by 30-40%. The blitter is fitted to the Mega ST, STE, Mega STE and Falcon as standard.

Boot disk

A disk (usually drive A or C), sometimes containing an exe-

what has happened. The best remedy is to switch off the computer and wait about twenty seconds before booting again.

C

Cache

An area of memory or disk space that holds some recently accessed or processed data in anticipation of its use by the processor or a program, thus saving on the time needed to process and construct it again.

Cartridge

Cartridges consist of 128 Kb of Read Only Memory (ROM) and plug into the cartridge slot, enabling instant program access.

and using no main memory except for the program's data. Some cartridges do not contain program ROMs but are interfaces for other devices, such as scanners and battery backed clocks or contain audio digitisers and samplers. Others are used as a security dongle.

Centronics

A standard for parallel data transfer (eight bits together) between microcomputers and printers. The port is based on a 36-way connector and the cable can be up to several metres long.

Clipboard

An area of memory or disk storage where a block of data can be temporarily stored from a program to be reused later or transferred to another application. There is a clipboard module for Atari's XCONTROL extensible control panel (CLIPBORD.CPX) that creates a CLIPBRD folder on the boot drive and uses it as a clipboard.

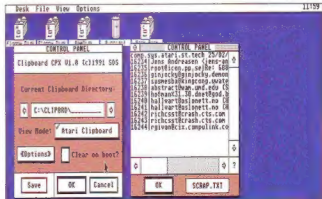
Close box

The icon in the top left corner of a GEM window that closes that window when clicked on and may also cause the program to exit.

Codec

A device used to convert sound into bit-patterns for transmission or storage and to reconvert them back again into sound. The Falcon uses a stereo 16-bit codec.

The CLIPBOARD.CPX sets up the clipboard path and enables the contents to be viewed (on the right) or cleared at any time. It is very useful for transferring bits of text or images between programs.



GOODMAN'S

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No matter how much coverage the ST Magazines give to Public Domain & Shareware, they only give you a sampler of the vast range available. As one of the longest established ST libraries in the World, we are constantly adding new titles to our, already extensive collection, so why not send today for our comprehensive PD & Shareware Guide, it's now approaching 260 pages, with good descriptions, screen shots, etc.

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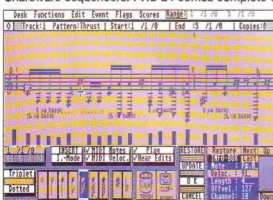
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